

Psychological Abstracts

VOLUME 23 · NUMBER 4 · APRIL 1949

EDITOR

C. M. LOUTTIT

ASSISTANT EDITOR

ALLEN J. SPROW

WITH THE CO-OPERATION OF

F. C. BARTLETT	<i>Cambridge University</i>
S. BLACHOWSKI	<i>University of Poznań</i>
R. PIRET	<i>University of Liège</i>
V. OSIPOV	<i>Leningrad</i>
J. PIAGET	<i>University of Geneva</i>
H. PIERON	<i>Sorbonne</i>
M. PONZO	<i>University of Rome</i>
M. L. REYMERT	<i>Mooseheart, Illinois</i>
L. S. TSAI	<i>University of Nanking, Chengtu</i>

Editorial Office: UNIVERSITY OF ILLINOIS, GALESBURG, ILL.; Business Office: PRINCE AND LEMON STREETS, LANCASTER, PENNSYLVANIA AND 1515 MASSACHUSETTS AVE., N. W., WASHINGTON 5, D. C. Send changes of address to: Psychological Abstracts, 1515 Massachusetts Ave., N. W., Washington 5, D. C.

CONTENTS

General

1525-1582

Theory & Systems • Methods & Apparatus • New Tests • Statistics • Reference Works • Organizations • History & Biography • Professional Problems of Psychology

Physiological Psychology

1583-1593

Nervous System

Receptive and Perceptual Processes

1594-1638

Vision • Audition

Response Processes

1639-1657

Complex Processes and Organizations

1658-1690

Learning & Memory • Thinking & Imagination • Intelligence • Personality • Aesthetics

Developmental Psychology

1691-1717

Childhood & Adolescence • Maturity & Old Age

Social Psychology

1718-1761

Methods & Measurements • Cultures & Cultural Relations • Social Institutions • Language & Communication • Social Action

Clinical Psychology, Guidance, Counseling

1762-1819

Methodology, Techniques • Diagnosis & Evaluation • Treatment Methods • Child Guidance • Vocational Guidance

Behavior Deviations

1820-1905

Mental Deficiency • Behavior Problems • Speech Disorders • Crime & Delinquency • Psychooses • Psychoneuroses • Psychosomatics • Clinical Neurology • Physically Handicapped

Educational Psychology

1906-1956

School Learning • Interests, Attitudes & Habits • Special Education • Educational Guidance • Educational Measurement • Education Staff Personnel

Personnel Psychology

1957-1984

Selection & Placement • Labor-Management Relations

Industrial and Other Applications

1985-1999

Industry • Business & Commerce • Professions

S U B S C R I P T I O N \$ 7 . 0 0 A Y E A R

F O R E I G N \$ 7 . 2 5

PUBLISHED MONTHLY, WITH TWO ISSUES DURING DECEMBER, AT PRINCE AND LEMON STREETS, LANCASTER, PENNSYLVANIA

BY THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INCORPORATED

Entered as second-class matter July 12, 1937, at the post-office at Lancaster, Pa., under the Act of March 3, 1879

Acceptance for mailing at the special rate of postage provided for in the Act of February 28, 1925, embodied in paragraph 4, Section 538, P. L. and R., authorized October 24, 1947.

AUTHOR INDEX¹

Abel, T., 1718
 Adcock, C., 1691
 Albright, M. A., 1900
 Alexander, F., 1529, 1887
 Alexander, L., 1861
 Allen, R. M., 1768
 Allen, W. Y., 1692
 Allport, G. W., 1734
 Alpenfels, E., 1719
 Ananiev, B. G., 1564
 Andrews, T. G., 1538
 Angus, L. R., 1802
 [Anon.], 1563, 1906, 1957
 Ansbacher, H. L., 1735
 Arthaud, R. L., 1748
 Arthur, G. B., 1963
 Asch, M. J., 1915
 Asch, S. E., 1626, 1627
 Atkinson, J. W., 1639
 Babin, R., 1669
 Bailliet, P., 1602
 Bakke, E. W., 1964
 Bartlett, F. C., 1986
 Bartlett, S. C., 1696
 Bartorelli, C., 1594
 Basler, R. P., 1685
 Baumgarten, F., 1958
 Baumgarten-Tramer, F., 1573
 Bavelas, A., 1731, 1965
 Becker, E. R., 1966
 Beebe-Center, J. G., 1595
 Békésy, G. v., 1565, 1629
 Bell, B. L., 1762
 Bell, E., Jr., 1878
 Berry, R. N., 1603
 Best, P., 1693
 Beusekom, G. v., 1596
 Bice, H. V., 1834
 Bingel, A., 1825
 Binswanger, L., 1525
 Birmingham, H. P., 1655
 Bischoff, V., 1604
 Bitter, W., 1879
 Bloomberg, C. M., 1803
 Boisen, A. T., 1769
 Boldt, W. H., 1835
 Bonaventura, E., 1605
 Bondy, C., 1778
 Bookhamer, R. S., 1824
 Bosley, E., 1894
 Bousfield, W. A., 1574
 Bradford, L., 1917
 Brain, W. R., 1895
 Brajkayahu, M., 1851
 Braizer, M. F., 1939
 Breen, W., 1760
 Brennan, J. F., 1556
 Bristow, W. H., 1907
 Bromberg, W., 1862
 Brown, T. G., 1566
 Brodzek, J., 1043(a)
 Bruce, R. W., 1662(a)
 Bugelski, B. R., 1663
 Campbell, D., 1692
 Campbell, S. L., 1664(a)
 Cargnelio, D., 1658
 Carlson, F. D., 1636, 1754
 Carlson, J. J., 1606
 Carp, A., 1782
 Carpenter, A., 1607
 Cass, W. A., Jr., 1782
 Cattell, R. B., 1720
 Cavemagh, W. E., 1694
 Chalman, R. C., 1911
 Chapman, R. L., 1659
 Chein, I., 1737
 Chipman, C. E., 1877
 Chittenden, G. E., 1937
 Christensen, H. T., 1935
 Christensen, J. M., 1987
 Christensen, J. A., Jr., 1781
 Churchman, C. W., 1530
 Clark, K. C., 1636, 1754
 Cofer, C. N., 1728
 Cohen, M. R., 1567
 Coleman, J. C., 1852
 Coleman, M. E., 1908(a)
 Combe, A. W., 1788
 Concha, J. B., 1539
 Conn, J. H., 1804
 Conrad, H. S., 1561
 Conrad, K., 1825
 Cosin, L. C., 1709
 Cottam, M., 1836
 Cox, R. L., 1736
 Cox, I., 1901
 Cox, P. W. L., 1948
 Craig, D., 1640(a)
 Crane, G. W., 1985
 Critchley, M., 1710
 Crosby, L. L., 1938
 Crow, A., 1909
 Crow, L. D., 1909
 Crutcher, H. B., 1837
 Crutchfield, R. S., 1723
 Curran, C. A., 1888
 Davis, H., 1630
 Davis, J., 1672
 Davis, R. C., 1641
 Dawson, R. M. C., 1591
 De Gramont, A., 1608
 De Proposito, C. J., 1838
 Despert, J. L., 1805
 Deutsch, A., 1820
 Deutacher, M., 1737
 Dévè, Ch., 1609
 Devereux, G., 1738
 Devolder, P. N., 1749
 Diel, P., 1531
 Dirksen, C., 1863
 Doll, E. A., 1839
 Dotson, G. E., 1918
 Dougan, C., 1660
 Drabkin, I. E., 1567
 Duff, J. C., 1948
 Dunbar, F., 1859
 Durkin, H. E., 1789
 Durup, G., 1610
 Ederle, W., 1825
 Edwards, A. L., 1552
 Edwards, P. M., 1988
 Egan, J. P., 1631, 1672
 Eisenberg, W. J., 1967
 Eisenhart, C., 1533
 Eisenstein, J. C., 1636, 1754
 Elkisch, P., 1770
 Ellison, D. G., 1642(a)
 Elonen, A. S., 1821
 Engle, T. L., 1936(a)
 Ernst, K., 1825
 Erner, M. S., 1637
 Faber, E. N., 1959
 Fantel, E., 1790
 Farrell, M. J., 1939
 Feldman, S., 1683
 File, Q. W., 1545
 Fishback, W. W., 1953
 Flanders, N. A., 1919
 Flesch, R., 1750
 Flurry, C., 1681
 Fodor, N., 1853
 Fomichev, A. P., 1952
 Förster, H., 1668
 Fortunatov, G. A., 1537
 Foulds, G. A., 1961
 Fox, L. K., 1910
 Foxe, A. N., 1864
 Frank, L. K., 1771
 Franklin, G. H., 1683
 Franklin, J. C., 1643(a)
 Freeman, G. L., 1583
 Freeman, W., 1870
 French, E. G., 1682
 French, T. M., 1887
 Freud, S., 1791
 Frick, F. C., 1666
 Friedman, O., 1632
 Friedman, P., 1721
 Friedmann, G., 1989
 Frisby, C. B., 1575
 Fulton, J. F., 1568
 Fults, A. C., 1920, 1921
 Funkenstein, D. H., 1585
 Gage, N. L., 1732(a)
 Gasca Diez, M., 1772
 Gates, A. I., 1911
 Gengerelli, J. A., 1554, 1611
 Gilchrist, J. C., 1544
 Gillespie, J. J., 1968
 Gillies, E. P., 1806
 Glazier, H. T., 1807
 Glenn, N. E., 1922
 Goldstein, I., 1840
 Goldstein, J., 1644
 Gourley, G. D., 1997
 Graf, M., 1686
 Graham, F. K., 1773
 Granit, R., 1584
 Grant, D. A., 1667
 Grant, V. W., 1645
 Greenblatt, M., 1585
 Greene, J. E., 1865
 Grice, G. R., 1668
 Grinker, R. R., 1792
 Gunther, B. S., 1539
 Haggard, E. A., 1669
 Haire, M., 1969
 Hall, H., 1642(a)
 Hamrin, S. A., 1949
 Harbeck, I., 1814
 Harding, G., 1793
 Harman, J. B., 1597
 Harmon, F. L., 1684
 Harna, E., 1808, 1809
 Harrington, D. O., 1890
 Harris, C. W., 1755
 Hartley, E. L., 1695, 1739, 1740
 Hastay, M. W., 1553
 Hawker, C. F., 1970
 Heinemann, A., 1587
 Henry, F. M., 1633
 Highbaugh, I., 1741
 Hightower, N. C., 1886
 Hirschfelder, M., 1612
 Hirschmann, J., 1825
 Hirsh, I. J., 1634
 Hoch, P. H., 1875
 Hohneck, A. N., 1748
 Holmgren, H., 1871
 Holway, A. R., 1923
 Horst, P., 1555
 Horwitz, M. K., 1873
 Horwitz, W. A., 1875
 Housner, G. W., 1556
 Hau, F. L. K., 1742
 Hullo, A., 1670
 Hungerland, H., 1687
 Hunnicutt, C. W., 1708
 Hunt, H. F., 1782
 Hunt, W. A., 1682
 Hunter, W. S., 1696
 Hutt, M. L., 1763
 Infield, H. F., 1751
 Ingram, C. P., 1946
 Irick, P., 1924(a)
 Irwin, O. C., 1697
 Ivanov, S. V., 1912
 Jager, A., 1613
 James, W., 1526
 Jenkins, W. O., 1673
 Jersild, A. I., 1911
 Jervis, G. A., 1841
 Joblin, E. E. M., 1940
 Johnson, L. C., 1781
 Johnson, W. M., 1711
 Jung, C. G., 1822
 Kalaidzhiev, A., 1614
 Kalinowsky, L. B., 1823, 1872
 Kantor, R. E., 1782
 Kaplan, A. J., 1824
 Kaplan, L., 1925
 Karnosh, L. J., 1878
 Karwoski, T. F., 1756
 Katz, J., 1615
 Katzell, R. A., 1646
 Kecskemeti, P., 1722
 Keikchev, K. Kh., 1926
 Kelly, E. M., 1941
 Kendall, B. S., 1698, 1773
 Kendall, M. G., 1560
 Keyes, B. L., 1824
 Keys, A., 1643(a)
 Kilby, R. W., 1880
 King, C. W., 1990
 Kingsbury, M., 1942
 Kirk, S. A., 1902
 Klebanoff, S. G., 1682
 Klugman, S. F., 1774
 Knickerbocker, I., 1971
 Koenker, R. H., 1927(a)
 Kolbanovskii, V. N., 1527
 Korman, T. A., 1954
 Kormer, A. F., 1821
 Korzybski, A., 1757
 Krech, D., 1723
 Kreidt, P. H., 1960
 Kreisler, O., 1873
 Kretschmer, E., 1825
 Kroeker, A. L., 1743
 Goldstein, I., 1840
 Goldstein, J., 1644
 Gourley, G. D., 1997
 Graf, M., 1686
 LaBarre, C., 1576
 Lambert, C., 1699
 Laaga, J. L., 1783
 Lauer, A. R., 1991
 Lawrence, M., 1638
 Ledgerwood, R., 1874(a)
 Le Grand, Y., 1616
 Lehman, R. T., 1752(a)
 Leites, N., 1722
 Leontiev, A. N., 1700, 1701
 Levy, S., 1842
 Lewis, D. R., 1598
 Liberman, A. M., 1671
 Lichtenstein, P. E., 1599
 Liebert, E., 1873
 Liebman, J. L., 1826
 Lief, A., 1569
 Long, H., 1972
 Lovelace, H. D., 1951
 Lovell, H. W., 1712
 Lourié, A., 1744
 Luchino, A. S., 1794
 Luft, J., 1724
 Luria, Z. H., 1647(a)
 Luque, O., 1588
 McAndrew, H., 1903
 McCalley, J. E., 1852
 McClelland, D. C., 1639
 McConnell, T. R., 1911
 McGregor, D., 1973
 MacGregor, E. G., 1600
 Mackenzie, B. K., 1745
 Mackworth, N. H., 1648
 McLaughlin, K. L., 1943
 McNamara, M., 1948
 McNeil, E. B., 1540
 Madow, W. G., 1557
 Maeder, A., 1827
 Magitot, A., 1617
 Magnusson, J. H., 1843
 Magoun, H. W., 1896
 Mall, G., 1825
 Mallinson, W. P., 1795
 Martínez-Arango, C., 1783
 Masserman, J., 1532
 Maurer, K. M., 1944
 Mautner, H., 1844
 Maynard, H. B., 1992
 Medina, L. J., 1881
 Mensh, I. N., 1682
 Menzel, R., 1652
 Meyers, R., 1533
 Migliorino, G., 1546
 Miller, H. E., 1811
 Miller, J. G., 1577, 1578
 Miller, K., 1882
 Milligan, W. L., 1812
 Miner, G. F., 1775
 Mintz, A., 1678
 Miotti, A., 1534
 Monrad-Krohn, G. H., 1858
 Moodie, W., 1828
 Moore, E. H., 1713
 Moreno, J. L., 1764, 1765, 1796, 1797, 1813
 Morris, C., 1725
 Mooser, H. E., 1928
 Mott, F. J., 1535
 Müller-Freienfels, R., 1688
 Münnich, K., 1649
 Murray, E., 1758
 Nahm, H., 1998
 Nakano, F., 1747
 Nash, E., 1945
 Nathanson, M., 1897
 National Research Council, Committee on Aviation Psychology, 1618
 National Society for Crippled Children and Adults, 1859
 Nelson, L., 1759
 Nesbitt, M., 1937
 New York (State), Department of Labor, 1817
 Nicol, E. A., 1974
 Nielsen, J. M., 1589
 Noel, W. K., 1590
 Nohl, H., 1570, 1913
 Norwich, S., 1904
 Oak-Bruce, L., 1929
 Oberndorf, C. P., 1829
 O'Brien, M. J., 1528
 Odber, H. S., 1683
 O'Reilly, E. P., 1955
 Ottomello, P., 1898
 Papez, J. W., 1830
 Partridge, D. C., 1914
 Peatore, N., 1644
 Pearson, G. H. J., 1854
 Perry, H. A., 1842
 Kretschmer, E., 1825
 Kroeker, A. L., 1743
 Goldstein, I., 1840
 Goldstein, J., 1644
 Gourley, G. D., 1997
 Graf, M., 1686
 LaBarre, C., 1576
 Lambert, C., 1699
 Laaga, J. L., 1783
 Lauer, A. R., 1991
 Lawrence, M., 1638
 Ledgerwood, R., 1874(a)
 Le Grand, Y., 1616
 Lehman, R. T., 1752(a)
 Leites, N., 1722
 Leontiev, A. N., 1700, 1701
 Levy, S., 1842
 Lewis, D. R., 1598
 Liberman, A. M., 1671
 Lichtenstein, P. E., 1599
 Liebert, E., 1873
 Liebman, J. L., 1826
 Lief, A., 1569
 Long, H., 1972
 Lovelace, H. D., 1951
 Lovell, H. W., 1712
 Lourié, A., 1744
 Luchino, A. S., 1794
 Luft, J., 1724
 Luria, Z. H., 1647(a)
 Luque, O., 1588
 McAndrew, H., 1903
 McCalley, J. E., 1852
 McClelland, D. C., 1639
 McConnell, T. R., 1911
 McGregor, D., 1973
 MacGregor, E. G., 1600
 Mackenzie, B. K., 1745
 Mackworth, N. H., 1648
 McLaughlin, K. L., 1943
 McNamara, M., 1948
 McNeil, E. B., 1540
 Madow, W. G., 1557
 Maeder, A., 1827
 Magitot, A., 1617
 Magnusson, J. H., 1843
 Magoun, H. W., 1896
 Mall, G., 1825
 Mallinson, W. P., 1795
 Martínez-Arango, C., 1783
 Masserman, J., 1532
 Maurer, K. M., 1944
 Mautner, H., 1844
 Maynard, H. B., 1992
 Medina, L. J., 1881
 Mensh, I. N., 1682
 Menzel, R., 1652
 Meyers, R., 1533
 Migliorino, G., 1546
 Miller, H. E., 1811
 Miller, J. G., 1577, 1578
 Miller, K., 1882
 Milligan, W. L., 1812
 Miner, G. F., 1775
 Mintz, A., 1678
 Miotti, A., 1534
 Monrad-Krohn, G. H., 1858
 Moodie, W., 1828
 Moore, E. H., 1713
 Moreno, J. L., 1764, 1765, 1796, 1797, 1813
 Morris, C., 1725
 Mooser, H. E., 1928
 Mott, F. J., 1535
 Müller-Freienfels, R., 1688
 Münnich, K., 1649
 Murray, E., 1758
 Nahm, H., 1998
 Nakano, F., 1747
 Nash, E., 1945
 Nathanson, M., 1897
 National Research Council, Committee on Aviation Psychology, 1618
 National Society for Crippled Children and Adults, 1859
 Nelson, L., 1759
 Nesbitt, M., 1937
 New York (State), Department of Labor, 1817
 Nicol, E. A., 1974
 Nielsen, J. M., 1589
 Noel, W. K., 1590
 Nohl, H., 1570, 1913
 Norwich, S., 1904
 Oak-Bruce, L., 1929
 Oberndorf, C. P., 1829
 O'Brien, M. J., 1528
 Odber, H. S., 1683
 O'Reilly, E. P., 1955
 Ottomello, P., 1898
 Papez, J. W., 1830
 Partridge, D. C., 1914
 Peatore, N., 1644
 Pearson, G. H. J., 1854
 Perry, H. A., 1842
 Kretschmer, E., 1825
 Kroeker, A. L., 1743
 Goldstein, I., 1840
 Goldstein, J., 1644
 Gourley, G. D., 1997
 Graf, M., 1686
 LaBarre, C., 1576
 Lambert, C., 1699
 Laaga, J. L., 1783
 Lauer, A. R., 1991
 Lawrence, M., 1638
 Ledgerwood, R., 1874(a)
 Le Grand, Y., 1616
 Lehman, R. T., 1752(a)
 Leites, N., 1722
 Leontiev, A. N., 1700, 1701
 Levy, S., 1842
 Lewis, D. R., 1598
 Liberman, A. M., 1671
 Lichtenstein, P. E., 1599
 Liebert, E., 1873
 Liebman, J. L., 1826
 Lief, A., 1569
 Long, H., 1972
 Lovelace, H. D., 1951
 Lovell, H. W., 1712
 Lourié, A., 1744
 Luchino, A. S., 1794
 Luft, J., 1724
 Luria, Z. H., 1647(a)
 Luque, O., 1588
 McAndrew, H., 1903
 McCalley, J. E., 1852
 McClelland, D. C., 1639
 McConnell, T. R., 1911
 McGregor, D., 1973
 MacGregor, E. G., 1600
 Mackenzie, B. K., 1745
 Mackworth, N. H., 1648
 McLaughlin, K. L., 1943
 McNamara, M., 1948
 McNeil, E. B., 1540
 Madow, W. G., 1557
 Maeder, A., 1827
 Magitot, A., 1617
 Magnusson, J. H., 1843
 Magoun, H. W., 1896
 Mall, G., 1825
 Mallinson, W. P., 1795
 Martínez-Arango, C., 1783
 Masserman, J., 1532
 Maurer, K. M., 1944
 Mautner, H., 1844
 Maynard, H. B., 1992
 Medina, L. J., 1881
 Mensh, I. N., 1682
 Menzel, R., 1652
 Meyers, R., 1533
 Migliorino, G., 1546
 Miller, H. E., 1811
 Miller, J. G., 1577, 1578
 Miller, K., 1882
 Milligan, W. L., 1812
 Miner, G. F., 1775
 Mintz, A., 1678
 Miotti, A., 1534
 Monrad-Krohn, G. H., 1858
 Moodie, W., 1828
 Moore, E. H., 1713
 Moreno, J. L., 1764, 1765, 1796, 1797, 1813
 Morris, C., 1725
 Mooser, H. E., 1928
 Mott, F. J., 1535
 Müller-Freienfels, R., 1688
 Münnich, K., 1649
 Murray, E., 1758
 Nahm, H., 1998
 Nakano, F., 1747
 Nash, E., 1945
 Nathanson, M., 1897
 National Research Council, Committee on Aviation Psychology, 1618
 National Society for Crippled Children and Adults, 1859
 Nelson, L., 1759
 Nesbitt, M., 1937
 New York (State), Department of Labor, 1817
 Nicol, E. A., 1974
 Nielsen, J. M., 1589
 Noel, W. K., 1590
 Nohl, H., 1570, 1913
 Norwich, S., 1904
 Oak-Bruce, L., 1929
 Oberndorf, C. P., 1829
 O'Brien, M. J., 1528
 Odber, H. S., 1683
 O'Reilly, E. P., 1955
 Ottomello, P., 1898
 Papez, J. W., 1830
 Partridge, D. C., 1914
 Peatore, N., 1644
 Pearson, G. H. J., 1854
 Perry, H. A., 1842
 Kretschmer, E., 1825
 Kroeker, A. L., 1743
 Goldstein, I., 1840
 Goldstein, J., 1644
 Gourley, G. D., 1997
 Graf, M., 1686
 LaBarre, C., 1576
 Lambert, C., 1699
 Laaga, J. L., 1783
 Lauer, A. R., 1991
 Lawrence, M., 1638
 Ledgerwood, R., 1874(a)
 Le Grand, Y., 1616
 Lehman, R. T., 1752(a)
 Leites, N., 1722
 Leontiev, A. N., 1700, 1701
 Levy, S., 1842
 Lewis, D. R., 1598
 Liberman, A. M., 1671
 Lichtenstein, P. E., 1599
 Liebert, E., 1873
 Liebman, J. L., 1826
 Lief, A., 1569
 Long, H., 1972
 Lovelace, H. D., 1951
 Lovell, H. W., 1712
 Lourié, A., 1744
 Luchino, A. S., 1794
 Luft, J., 1724
 Luria, Z. H., 1647(a)
 Luque, O., 1588
 McAndrew, H., 1903
 McCalley, J. E., 1852
 McClelland, D. C., 1639
 McConnell, T. R., 1911
 McGregor, D., 1973
 MacGregor, E. G., 1600
 Mackenzie, B. K., 1745
 Mackworth, N. H., 1648
 McLaughlin, K. L., 1943
 McNamara, M., 1948
 McNeil, E. B., 1540
 Madow, W. G., 1557
 Maeder, A., 1827
 Magitot, A., 1617
 Magnusson, J. H., 1843
 Magoun, H. W., 1896
 Mall, G., 1825
 Mallinson, W. P., 1795
 Martínez-Arango, C., 1783
 Masserman, J., 1532
 Maurer, K. M., 1944
 Mautner, H., 1844
 Maynard, H. B., 1992
 Medina, L. J., 1881
 Mensh, I. N., 1682
 Menzel, R., 1652
 Meyers, R., 1533
 Migliorino, G., 1546
 Miller, H. E., 1811
 Miller, J. G., 1577, 1578
 Miller, K., 1882
 Milligan, W. L., 1812
 Miner, G. F., 1775
 Mintz, A., 1678
 Miotti, A., 1534
 Monrad-Krohn, G. H., 1858
 Moodie, W., 1828
 Moore, E. H., 1713
 Moreno, J. L., 1764, 1765, 1796, 1797, 1813
 Morris, C., 1725
 Mooser, H. E., 1928
 Mott, F. J., 1535
 Müller-Freienfels, R., 1688
 Münnich, K., 1649
 Murray, E., 1758
 Nahm, H., 1998
 Nakano, F., 1747
 Nash, E., 1945
 Nathanson, M., 1897
 National Research Council, Committee on Aviation Psychology, 1618
 National Society for Crippled Children and Adults, 1859
 Nelson, L., 1759
 Nesbitt, M., 1937
 New York (State), Department of Labor, 1817
 Nicol, E. A., 1974
 Nielsen, J. M., 1589
 Noel, W. K., 1590
 Nohl, H., 1570, 1913
 Norwich, S., 1904
 Oak-Bruce, L., 1929
 Oberndorf, C. P., 1829
 O'Brien, M. J., 1528
 Odber, H. S., 1683
 O'Reilly, E. P., 1955
 Ottomello, P., 1898
 Papez, J. W., 1830
 Partridge, D. C., 1914
 Peatore, N., 1644
 Pearson, G. H. J., 1854
 Perry, H. A., 1842
 Kretschmer, E., 1825
 Kroeker, A. L., 1743
 Goldstein, I., 1840
 Goldstein, J., 1644
 Gourley, G. D., 1997
 Graf, M., 1686
 LaBarre, C., 1576
 Lambert, C., 1699
 Laaga, J. L., 1783
 Lauer, A. R., 1991
 Lawrence, M., 1638
 Ledgerwood, R., 1874(a)
 Le Grand, Y., 1616
 Lehman, R. T., 1752(a)
 Leites, N., 1722
 Leontiev, A. N., 1700, 1701
 Levy, S., 1842
 Lewis, D. R., 1598
 Liberman, A. M., 1671
 Lichtenstein, P. E., 1599
 Liebert, E., 1873
 Liebman, J. L., 1826
 Lief, A., 1569
 Long, H., 1972
 Lovelace, H. D., 1951
 Lovell, H. W., 1712
 Lourié, A., 1744
 Luchino, A. S., 1794
 Luft, J., 1724
 Luria, Z. H., 1647(a)
 Luque, O., 1588
 McAndrew, H., 1903
 McCalley, J. E., 1852
 McClelland, D. C., 1639
 McConnell, T. R., 1911
 McGregor, D., 1973
 MacGregor, E. G., 1600
 Mackenzie, B. K., 1745
 Mackworth, N. H., 1648
 McLaughlin, K. L., 1943
 McNamara, M., 1948
 McNeil, E. B., 1540
 Madow, W. G., 1557
 Maeder, A., 1827
 Magitot, A., 1617
 Magnusson, J. H., 1843
 Magoun, H. W., 1896
 Mall, G., 1825
 Mallinson, W. P., 1795
 Martínez-Arango, C., 1783
 Masserman, J., 1532
 Maurer, K. M., 1944
 Mautner, H., 1844
 Maynard, H. B., 1992
 Medina, L. J., 1881
 Mensh, I. N., 1682
 Menzel, R., 1652
 Meyers, R., 1533
 Migliorino, G., 1546
 Miller, H. E., 1811
 Miller, J. G., 1577, 1578
 Miller, K., 1882
 Milligan, W. L., 1812
 Miner, G. F., 1775
 Mintz, A., 1678
 Miotti, A., 1534
 Monrad-Krohn, G. H., 1858
 Moodie, W., 1828
 Moore, E. H., 1713
 Moreno, J. L., 1764, 1765, 1796, 1797, 1813
 Morris, C., 1725
 Mooser, H. E., 1928
 Mott, F. J., 1535
 Müller-Freienfels, R., 1688
 Münnich, K., 1649
 Murray, E., 1758
 Nahm, H., 1998
 Nakano, F

Psychological Abstracts

VOLUME 23

NUMBER 4

APRIL 1949

GENERAL

1525. Binswanger, Ludwig. *Ausgewählte Vorträge und Aufsätze. Bd. I Zur phänomenologischen Anthropologie.* (Selected lectures and essays. Vol. I. Concerning phenomenological anthropology). Bern: Francke, 1947. 217 p. Fr.-80.—The seven items contained in this volume date from 1922 to 1946 and cover the following themes: phenomenology, life function and inner life history, dream and existence, Heraclitean conception of man, concerning psychotherapy, Freud's conception of man in the light of anthropology, concerning the existentially analytic direction of investigation in psychiatry. All the pieces are interrelated through the application of the philosophy of Brentano, Husserl, and Heidegger, and the psychoanalysis of Freud, to normal and abnormal psychology.—J. R. Kantor.

1526. James, William. *Compendio de psicología.* (Psychology, briefer course.) Buenos Aires: Emecé Editores, 1947. 575 p.—A translation of William James "Psychology, briefer course" by Antonio Salcedo.

1527. Kolbanovskii, V. N. *O nekotoirkh nedostatkakh knigi prof. S. L. Rubenshtaina.* (Some insufficiencies of Prof. S. L. Rubenshtain's book.) *Sovetskiy pedag.*, 1947, No. 6, 103-110.—The present writer in reviewing the first edition of this book in 1941 said that the merit of the book lay in the fact that the author laid out "the basic principles of scientific materialist psychology and the basic tendencies of its development." At the same time a number of insufficiencies were pointed out which it was felt detracted from the merits of the book. First of all, Rubenshtain left loop-holes in his argument through which idealist and metaphysical errors might re-enter. Secondly, there were some factual errors, and thirdly the language was too involved. The second edition is not substantially revised. Errors like these, which might be overlooked six years ago, cannot be overlooked at the present when Soviet psychology is faced with such important ideological tasks. The author is urged to correct these matters in the third edition.—R. A. Bauer.

1528. Schneiders, Alexander A. (*U. Detroit, Mich.*), & O'Brien, Marguerite J. *Introductory psychology; the principles of human adjustment.* Ypsilanti, Mich.: University Lithoprinters, 1948. xiii, 305 p.—According to the author, this book was designed to reduce the vast coverage, lack of organization, the philosophical questions and special pleading found in many textbooks. The introduction (Part I) treats of the nature, the methods and

techniques of psychology. Part II, personality and adjustment, contains the following chapters: personality and its determinants; the physical determinants of personality and social and psychological determinants of personality. Part III, devoted to mental activity and experience, considers in turn sensory experience, processes of perception, imagery, thought, intelligence and its measurement and learning and memory. Part IV, human motivation and behavior, devotes a chapter to each of the following: the principles of behavior; principles of human motivation; volitions and choice and feeling and emotion. Seven page glossary and index.—N. H. Pronko.

THEORY & SYSTEMS

1529. Alexander, Franz. (*Chicago (Ill.) Institute for Psychoanalysis.*) *Fundamentals of psychoanalysis.* New York: W. W. Norton, 1948. 312 p. \$3.75.—This is a presentation of the theory and application of psychoanalysis as developed by the author. The principles of stability (Freud-Fechner), economy or inertia, and surplus energy are considered the basic principles of psychodynamics. The ego, its structure, development, and defenses, are described, and psychopathology is interpreted in terms of ego defense. There is a chapter devoted to psychoanalytic therapy. Chapter bibliographies.—A. J. Sprow.

1530. Churchman, C. West. (*Wayne U., Detroit, Mich.*) *Theory of experimental inference.* New York: Macmillan, 1948. ix, 292 p. \$4.25.—From statistical situations the author derives the assumption that experimental inference constitutes the best methodology of science. Experimental inference, as contrasted with historical rationalism and empiricism, includes an ideal based on a continuum and requires a value or ethical judgment. The viewpoint, illustrated by the problem of controlling the qualities of manufactured products, is expounded in a series of 16 chapters, 6 of these chapters present the historical and current-philosophical content of the author's theory.—J. R. Kantor.

1531. Diel, Paul. *Psychologie de la motivation; théorie et application thérapeutique.* (The psychology of motivation; theory and therapeutic application). Paris: Presses Universitaires de France, 1948. xi, 298 p. 260 fr.—All externally observable psychic reactions have internal causes called motives. External reactions can be observed and often measured. Motives, however, can be studied only by the method of introspection. The author speaks of

introspection in the sense of a rigorous, methodical technique adhering to scientific process. "Motivation exists in the mind of each man and man can understand the living motivation only in his own mind. It is only through the aid of comprehending his own motivation that man can understand the motivation of someone else." All human relationships, human life, sympathies and antipathies, are based on the unconscious function of projective introspection. Pathological symptoms are only made apparent when this projective introspection is deranged, suffers, and has become morbid introspection, false interpretation. A forty-page appendix provides a lengthy excerpt of an individual case analysis and conclusions.—*B. Sless.*

1532. Masserman, Jules H. (*U. of Chicago, Ill.*) *Una contribución experimental al problema de la neurosis.* (An experimental contribution to the problem of neurosis.) *Rev. argent. Neurol. Psiquiat.*, Rosario, 1946, 11, 3-23.—The author's experimental designs for analyzing the biodynamics of behavior and for discerning the principles which will apply to animal as well as human subjects, to "normal" or "abnormal" behavior, and to clinical and experimental therapeutics are summarized.—*F. C. Sumner.*

1533. Meyers, Russell. (*State U. Iowa, Iowa City.*) *The nervous system and general semantics: II. 'Reality and unreality.'* *Etc. Rev. gen. Semant.*, 1948, 6, 27-38.—This article is the second in a series written from the point of view of a general semanticist. The contention is made that in psychology and psychiatry much use is made of the reality-unreality dichotomy but seldom is an exposition given relative to what is meant by these terms. The author points out that man's sensory equipment is capable of responding to stimuli only within certain limits. Therefore, "the critical student will suspect that what thus takes place 'in' us, that is, the intraorganic experiential processes, cannot confidently be considered as 'real' if by the latter term is meant anything resembling faithful reproduction of that presumed to constitute all or even a part of the environment." The conclusion reached is that an individual considers real that to which he has acquired adaptive behavior patterns. 17 references.—*H. R. Myklebust.*

1534. Miotto, Antonio. *Psicanalisi in trasformazione.* (Psychoanalysis in transformation.) *Riv. Psicol.*, 1947, 43, 193-197.—For a very long time psychoanalysis was globally identified with the original teachings of Sigmund Freud. Reactions of an ultra-orthodox and paranoid kind against exclusive allegiance to and idolatry of Freud commenced with the first disciples of Freud. More recently, particularly in the U. S., it has become common to speak of a certain elasticity of psychoanalysis and of the abandonment of the original sectarian spirit. In actuality, psychoanalysis has, despite the resistance of die-hard orthodox adherents, freed itself from the original Freudian dogmas, has accepted free discussion, has collaborated with psychologists of other viewpoints and finally has espoused the experimental method. The present author rapidly reviews the

positions of a few liberals among more recent European psychoanalysts: Dalbiez, Marcel Boll, Madeleine Cavé, and Hesnard.—*F. C. Sumner.*

1535. Mott, Francis J. *Biosynthesis: first statement of a configurational psychology.* Philadelphia: David McKay, 1948. xxii, 340 p. \$10.00.—Biosynthesis asserts the unitary origin of all phenomena: inorganic, organic, and psychological. Part I is an attempt to direct the mind in tracing a Universal Design in the manifold aspects of these three areas. Part II shows the procedure by which the individual mind may find the same essential configuration within its own depths. Part III presents "an outline of the experiences gained through the employment of the technique outlined in Part Two, and musters these experiences into a story of the chronological development of the individual consciousness from the mother's womb to the brain." The complete concept of biosynthesis will emerge only after the completion of a trilogy, of which this is the first volume.—*N. H. Pronko.*

1536. Smirnov, A. A. *Zadachi i soderzhanie prepodavania psichologii v pedagogicheskikh i uchitelskikh institutakh.* (The tasks and the content of instruction in psychology in pedagogical and teachers' institutions.) *Sovetsk. pedag.*, 1947, No. 12, 60-69.—"The antiscientific concepts which bourgeois psychology holds regarding capacities and abilities have been overcome, and the possibilities for the development of all aspects of personality have been stressed. The Communist Party played a leading role in giving a correct approach to this problem . . . ; bourgeois psychology takes the 'unconscious' as a point of departure, as though it were the basic determinant of human psychology . . . ; soviet psychology has explicitly fostered the theory that consciousness is the highest, most specifically human level of development of the psyche, and has indicated the dominant role which conscious influences play as compared with unconscious influences." The new decree of the Central Committee (1946) poses a set of tasks for soviet psychology. "First of all, it is essential that the psychology taught in our schools be a fundamentally soviet psychology, the psychology of soviet man. Materials must be selected from soviet reality, from the life of soviet people. The task of ideo-political training demands a broad revealing of the ideologically alien, reactionary, teachings of bourgeois psychologists." Attitude testing is singled out. "While we may use what is useful in foreign psychology, it is necessary to keep our youth informed of the scientific and moral pre-eminence of soviet science."—*R. A. Bauer.*

1537. Sokolov, M. V., & Fortunatov, G. A. *O prepodavanii psichologii v sredni shkole.* (The problem of presentation of psychology in the middle schools.) *Sovetsk. pedag.*, 1947, No. 8, 66-78.—The study of psychology is essential for the formation of a communist world view. The system of scientific knowledge which students get in the middle school is not complete without a foundation in psychology. It gives the student a better understanding of himself

and of the nature of reality. Soviet dialectical-psychology shows that knowledge exists in inseparable unity with positive action on the world which that knowledge reflects. It is not a purely abstract activity. Psychology inspects the immediate moving forces and motives of human behavior, and the basic merits of the moral and esthetic order. Another reason for studying psychology is that it gives man an understanding of himself. The remainder of the article is concerned with techniques for presentation of psychological material. Examples are, the use of actual soviet heroes as exhibiting certain psychological characteristics, and—on another level—the need to explain to the student that certain common words such as *imagination* have a specialized meaning in psychology.—R. A. Bauer.

[See also abstract 1718.]

METHODS & APPARATUS

1538. Andrews, T. G. Some psychological apparatus: a classified bibliography. *Psychol. Monogr.*, 1948, 62, 38 p.—A bibliography of 942 articles appearing in psychological and physiological journals in which apparatus is specifically cited. In cases where *Psychological Abstracts* presents a useful summary of the article, the year and item number of the abstract citation is given. Articles in which original titles are given in a foreign language only the English translations are included.—M. A. Seidenfeld.

1539. Gunther, B. S., & Concha, J. B. (S. Concepción, Chile.) A new method for the electrical recording of mechanical deformations. *Proc. Soc. exp. Biol.*, N. Y., 1948, 69, 302-303.—A low cost, "universally" applicable electrical method for recording pressure changes is described. Its use depends upon variations in resistance occurring in a glass capillary containing equal volumes of alcohol and glycerin. Copper wires are inserted into the 2 ends 1 of which is movable, being connected to a membrane that permits spacial displacement. These electrodes are connected to an electric system consisting of a battery (10 volts) and a switch. Necessary voltage obtains by changing the position of the cursor in the resistance.—L. A. Pennington.

1540. McNeil, Elton B. (U. Michigan, Ann Arbor.), & Sparer, Paul. The use of phonograph records for the induction of hypnosis. *J. abnorm. soc. Psychol.*, 1948, 43, 546-547.—Experiments with hypnosis are facilitated by use of two 16-inch phonograph records to induce hypnosis in one or more subjects and to prepare them for transfer of control to another operator. 21 out of 24 subjects were hypnotized to a depth of 52 or more by the LeCron-Bordeaux index.—C. M. Harsh.

1541. Pilgrim, Francis J. (U. Pittsburgh, Pa.) A simple electronic relay for counting, timing, or automatic control. *J. Psychol.*, 1948, 26, 537-540.—The author states that a simple device is often needed to measure some reaction which runs on little input and with minimal time lag. The relay in the de-

scribed circuit opens or closes by means of a change in capacitance. This makes possible such recordings as reaction time, and counting and timing of simple conditioned responses.—R. W. Husband.

1542. Rose, Arnold M. (Washington U., St. Louis, Mo.) The selection of problems for research. *Amer. J. Sociol.*, 1948, 54, 219-227.—The need for selection of research problems and data imposes an obligation upon scientists to specify the criteria for selection. The possibility of securing universal generalizations is limited in social science, necessitating a shift toward methodological and practical studies. There is nothing unscientific about practical research, provided that the hypotheses are put in proper form; nor is there any opposition between theoretical and practical research. In fact, research which is deliberately practical is likely, from both historical and logical considerations, to have greater theoretical value and to meet more of the criteria of science than research which avoids practical implications.—D. L. Glick.

1543. Schenbach, W. E. Eine Fliegerdrehkammer als psychotechnisches Forschungsgerät. (A revolving airplane cabin as an apparatus of psychotechnical research.) *Industr. Psychotech.*, 1941, 18, 24-28.—A description is given of an experimental airplane cabin revolvable about a cylindrical median axis. Designed for apprenticeship in piloting, it permits also the study of psychophysiological functions which intervene in the piloting of an airplane.—(Courtesy of *Année psychol.*)

1544. Wenger, M. A., & Gilchrist, J. C. (U. California, Los Angeles.) A comparison of two indices of palmar sweating. *J. exp. Psychol.*, 1948, 38, 757-761.—"A new colorimetric technique for the study of sweating (ferric chloride tannic acid stain) has been compared with the technique of palmar conductance for (a) test-retest reliability, and (b) validity as a measure of autonomic function. An indirect approach was made to the latter problem in terms of the relationship of each index to other autonomically innervated variables as measured in 251 young adult males. Palmar conductance was shown to be a more reliable measure than the stain index, and to bear a closer relationship to the other autonomic variables. The coefficient of correlation between the two indices themselves was .31."—R. B. Ammons.

NEW TESTS

1545. File, Quentin W., & Remmers, H. H. How supervise? New York: Psychological Corporation, 1948.—3 forms. Untimed, (25 min.) Test blanks, (Forms A and B, 1943, and Form M, 1948, \$1.75 per 25); Scoring keys; Manual, 8 p. revised, 1948. For supervisors in industry.—(See *J. consult. Psychol.*, 1948, 12, 439.)

1546. Migliorino, Giuseppe. (U. Rome, Italy.) Ricerche sulla struttura psicologica del reattivo di Bedini. (Researches on the psychological structure of the Bedini test.) *Riv. Psicol.*, 1947, 43, 154-171.

—The Bedini test of "distributed attention" consisting of 40 disks in 5 different colors located at different points on 5 vertical lines of the same colors but with the color of the disk in each case not being the same as the color of the line on which it is located is described and illustrated. The subject is required to draw a line from the first disk (blue) at the bottom of the sheet so as to unite the remaining 39 disks by going always to the disk which is found on a vertical line that has the same color as the disk from which one just left. The present author sets forth the results of his own experimental studies of 100 individuals with the Bedini test. These studies were made with the aim of deriving introspective data which might prove useful for the study of the psychological structure of the test. The subjects were: (1) a group of intellectuals; (2) a group of women; (3) a group of workers, chauffeurs, railway workers. The results are summarized and discussed. Among the protocols the most interesting and significant ones are reported in their entirety. The author examines the possibilities of application for this test and discusses the procedure for "inverted trials."—*F. C. Sumner.*

1547. Sloan, William. (*Lincoln State School, Lincoln, Ill.*) *Lincoln adaptation of the Oseretsky test.* Lincoln, Ill.: Author, 1948.—Ages 4-16. Individual test. 1 form. Revised manual, iv, 68 p.—(See *J. consult. Psychol.*, 1948, 12, 439-440.)

1548. Turner, William D. (*U. Pennsylvania, Philadelphia.*) *Altruism and its measurement in children.* *J. abnorm. soc. Psychol.*, 1948, 43, 502-516.—A scale of altruism is described for use with an informer who is familiar with the subject's responses in 30 situations involving competition, frustration, reassurance, threats, prolonged tasks, or conversation. When tried in the Cambridge-Somerville Youth Study the scale had a split-half reliability of .83 and rather high correlations with ethical goodness, stability, and other socially desirable traits; but low correlations with non-ethical measures. There was no increase of altruism from 9 to 16 years of age. It is thought that altruism may be a general trait.—*C. M. Harsh.*

1549. Van Der Lught, M. J. A. (*New York U. V. D. L. Adult Psychomotor Test series, for the measurement of manual ability.*)—Ages 16-adult. Individual test. 1 form. Mainly untimed, (30) min. Testing equipment (\$48.00), Paper materials (\$2.50 per 25), Manual, 61 p. (\$1.75). The Van Der Lught psychomotor series consists of 10 subtests, entitled speed prehension, speed asynkinesia, pressure reproduction, pressure control, accuracy-steadiness, accuracy-precision, motor memory-direction, motor memory-spatial, coordination-static, and coordination-dynamic. (See *J. consult. Psychol.*, 1948, 12, 440.)

1550. Van Lennep, D. J. (*Netherlands Inst. of Industr. Psychol., Utrecht.*) *Four Picture Test (1930).* The Hague: Martinus Nijhoff, 1948. Test blanks and 48 p. manual, Guilders 65.00.—A projective technique, the Four Picture Test consists of

4 water color pictures of varied size, designed to represent different general situations: "(I) being together with one other person, (II) being personally alone, (III) being socially alone, (IV) being together with many other persons." The pictures were especially prepared for the test and have purposefully been kept vague and expressionless. First used in 1930, the test was not officially released until 1947 after validation studies on over 20,000 subjects. For best results, the author recommends exhibiting the pictures to the subject for 1 minute and then asking him to write down a story, including and combining all 4 pictures. He is permitted to begin with any picture and may proceed in any order desired. Time for administration was found to average 15 minutes while number of different stories possible seemed limitless. "The stories produced appear to be very personal and contain projections of characteristics and conflicts, especially of the general attitude towards life of the subject." The English-language manual contains a brief discussion of theoretical considerations, instructions for test administration, and suggestions for interpretation. Included also are 4 sample records and the author's resultant analyses.—*H. P. David.*

1551. Zulliger, Hans. (*Ittigen, Bern, Switzerland.*) *Der Z-Test; ein formdeut-Verfahren zur psychologischen Untersuchung von Gruppen.* (The Z-test; a projective method for the psychological examination of groups.) Bern, Switzerland: Hans Huber, 1948. 72 p. Fr. 8.00. Slides Fr. 32.00.—The Z-test was developed in 1942 by the Psychological Service of the Swiss Army in answer to the demand for a large scale projective technique, suitable for group administration and swift interpretation. It was decided not to use the original Rorschach blots in order to prevent possible invalidation of subsequent individual examinations. Instead 3 ink blots were finally selected out of 800 choices, and prepared on slides for projection onto a screen. Test results are scored according to Rorschach standards. As part of a comprehensive test battery, the principal purpose of the Z-test was that of a "screening aid," designed to sift out for further examination officer candidates deviating from the accepted norm. The author reports high correlation with full scale Rorschach administrations. The text cites history and development, gives instructions for administration and scoring, and presents suggestions for interpretations, based upon over 2000 case records. 14 sample protocols are included. Industrial and vocational applications are indicated.—*H. P. David.*

STATISTICS

1552. Edwards, Allen L. (*U. Washington, Seattle.*) *Note on the "correction for continuity" in testing the significance of the difference between correlated proportions.* *Psychometrika*, 1948, 13, 185-187.—"Methods of correcting for continuity in tests of significance of the difference between correlated proportions are presented. These corrections should increase the range of usefulness of the formulas

developed by McNemar." 2 references.—*M. O. Wilson.*

1553. Eisenhart, C. (*National Bureau of Standards, Washington, D. C.*), Hastay, M. W., & Wallis, W. A. [Ed.] *Techniques of statistical analysis*. New York: McGraw-Hill, 1947, 473 p. \$6.00.—More specifically titled "Selected techniques of statistical analysis for scientific and industrial research and production and management engineering" this volume contains 17 relatively independent chapters by a variety of authors associated with the Statistical Research Group for the Applied Mathematics Panel of the Office of Scientific Research and Development. "The book is written for scientists, engineers, managers, and statisticians . . . [who are] interested in applying statistical techniques . . . [but who may not have] . . . much interest in nor time for studying general statistical theory as such, or else [feel they] can best understand and appreciate statistical theory through a series of special problems." Part I, Industrial Statistics, is concerned with such topics as acceptance inspection, tolerance limits, multivariate quality control, and variability in amount of inspection for various sampling schemes. Part II, Planning Experiments, reports 7 applications of analyses to such problems as comparison of percentages, standard deviations, determination of distribution parameters, and abandonment of experiments prior to completion. Part III, Techniques and Tables, presents specific solutions involving sample mean probabilities, variance estimation, inverse sine transformation of proportions, and a chapter on the elements of sequential analysis.—*W. C. Schaefer.*

1554. Gengerelli, J. A. (*U. California, Los Angeles.*) A simplified method for approximating multiple regression coefficients. *Psychometrika*, 1948, 13, 135-146.—The method, one of exhaustion, dispenses with the solution of simultaneous equations. Although R thus obtained is smaller than normally, the discrepancy does not exceed .05. Since the weights are calculated successively, any test yielding a negative or very small weight may be discarded without affecting weights already found. 32 references.—*M. O. Wilson.*

1555. Horst, Paul. (*U. Washington, Seattle.*) Regression weights as a function of test length. *Psychometrika*, 1948, 13, 125-134.—Assuming that the score in each test in a battery is the number of correct answers, then the composite score would be the sum of the raw score regression weights. With reliabilities given, lengths of the tests may be varied so that all weights will be equal. The composite score would be the total number of items answered, thus simplifying the scoring when the volume of scoring is large. A procedure for altering the lengths of the tests and its proof are presented.—*M. O. Wilson.*

1556. Housner, G. W., & Brennan, J. F. (*California Inst. Technology, Pasadena.*) The estimation of linear trends. *Ann. math. Statist.*, 1948, 19, 380-388.—The problem discussed is bivariate regression

when both variates are random and have a finite number of means which are distributed along a straight line. "A regression statistic is derived which is independent of change in scale so that a priori knowledge of the frequency distribution parameters is not required in order to obtain a unique estimate. The statistic is shown to be consistent. The efficiency of the estimate is discussed and its asymptotic distribution is derived for the case when the random variables are normally distributed. A numerical example is presented which compares the performance of the statistic of this paper with that of other commonly used statistics. In the example it is found that the method of estimation proposed in this paper is more efficient." Tables and derivations are included.—*G. C. Carter.*

1557. Madow, William G. (*U. North Carolina, Chapel Hill.*) On a source of downward bias in the analysis of variance and covariance. *Ann. math. Statist.*, 1948, 19, 351-359.—The generalized student's hypothesis is used as a basis for discussion of bias. "It is shown that if, in the analysis of variance, the experiments are not in a state of statistical control due to variations in the true means, then the test will have a downward bias. The power function of the analysis of variance test is obtained when this downward bias is present. . . . The rather sharp effects of a moderate lack of statistical control on the probabilities associated with the F-test indicate the importance of testing for statistical control outside of the industrial applications now made. Furthermore, it would seem advisable to investigate tests and designs that are less sensitive to the lack of control than is the F-test." Substantiating mathematical derivations are included.—*G. C. Carter.*

1558. Robbins, Herbert. (*U. North Carolina, Chapel Hill.*) Mixture of distributions. *Ann. math. Statist.*, 1948, 19, 360-369.—It is sometimes necessary to work with mixtures of measures or distributions. "In the simplest case it may, for example, be reasonable to assume that one is dealing with the mixture in given proportions of a finite number of normal populations with different means or variances. The mixture parameter may also be denumerably infinite, as in the theory of sums of a random number of random variables, or continuous, as in the compound Poisson distribution. . . . The first type of linearity has as its continuous analog the theorem of Fubini on interchange of order of integration; the second type of linearity has a corresponding continuous analog which is of importance whenever one deals with mixtures of measures or distributions, and which forms the subject of the present paper. . . . A general measure theoretic form of the fundamental theorem is given in Section 2, and in Section 3 the theorem is formulated in terms of finite dimensional spaces and distribution functions. The operation of convolution as an example of mixture is treated briefly in Section 4, while Section 5 is devoted to random sampling from a mixed population." Supporting formulae and derivations are included.—*G. C. Carter.*

1559. Rosner, Burt. (*U. Chicago, Ill.*) An algebraic solution for the communalities. *Psychometrika*, 1948, 13, 181-184.—"Previous methods of estimating the communalities have involved a certain arbitrariness, since they depended on selecting test subgroups or parts of the data in *R*. A theory is presented showing that this difficulty can be avoided in principle. In its present form, the theory is not offered as a practical computing procedure. The basis of the new method lies in the Cayley-Hamilton theorem: Any square matrix satisfies its own characteristic equation." 4 references.—*M. O. Wilson*.

1560. Yule, G. Udny, & Kendall, M. G. *Introdução à teoria da estatística*. (Introduction to the theory of statistics.) Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística, 1948. 681 p.—This is a translation into Portuguese of the 13th English edition.

[See also abstract 1691.]

REFERENCE WORKS

1561. Conrad, Herbert S. Preparation of manuscripts for publication as monographs. *J. Psychol.*, 1948, 26, 447-459.—Rules and suggestions are given, especially for the preparation of psychological monographs. Details of all conceivable points from size of paper and style of typewriter to handling of cross references are presented.—*R. W. Husband*.

ORGANIZATIONS

1562. Savage, Howard J. Graduate Record Office into Educational Testing Service. *Carnegie Found. Advanc. Teach.*, 43rd Ann. Rep., 1948, 35-42.—The history of the cooperative organization of the Educational Testing Service is described.—*C. M. Louttit*.

HISTORY & BIOGRAPHY

1563. [Anon.] Henry Alford Ruger. *Carnegie Found. Advanc. Teach.*, 43rd Ann. Rep., 1948, 113-114.—Obituary.

1564. Ananiev, B. G. *Russkaia nauchnaia psichologija i ee rol v mirovoi psikhologicheskoi nauke*. (Russian scientific psychology and its role in world psychology.) *Sovetsk. pedag.*, 1945, No. 3, 47-57.—In using the term "scientific" Ananiev draws the line between those psychologists who are presently accepted as legitimate forerunners of present day Soviet psychology, and such "idealists" as Chelpanov and the other "official psychologists" of the czarist era. Padishev, Belinskii, Hertzen, and especially Chernishevskii were interested in the lawfulness of the psychic process. This was a big contribution of Russian psychology. Another contribution was the concept that the cortical activity formed the material substratum of the psychic processes. This work began with Sechenov and was carried forth by Pavlov and Bekhterev. The "objective psychology" of Pavlov and Bekhterev found acceptance in the behaviorism of Watson.

Lange anticipated the work of the Gestaltists. Röbeck and Lazurskii had an influence on Western characterology.—*R. A. Bauer*.

1565. Békésy, Georg v., & Rosenblith, Walter A. (*Harvard U., Cambridge, Mass.*) The early history of hearing-observations and theories. *J. acoust. Soc. Amer.*, 1948, 20, 727-748.—The early history of hearing is discussed under the following headings: the views of antiquity, the period of gross anatomy, the more detailed structure of the inner ear, early resonance theories of hearing, and progress in otology. This summary covers ideas about hearing from the time of the early Egyptians to the middle of the nineteenth century. 182-item bibliography.—*W. R. Garner*.

1566. Brown, T. Graham. (*U. Wales.*) Sherrington—the man. *Brit. med. J.*, 1947, 2, 810-812.—In celebration of the 90th anniversary of Charles Sherrington's birth (b. Nov. 27, 1857) are recalled the early influences upon his intellectual life, his experiences gained abroad, the contributions to knowledge and the varied interests of this world famous neurophysiologist.—*F. C. Sumner*.

1567. Cohen, Morris R., & Drabkin, I. E. A source book in Greek science. New York: McGraw-Hill, 1948. xxi, 579 p. \$9.00.—This collection of extracts from Greek classic authors includes materials from the various sciences including one section on physiological psychology. Other material of psychological interest is to be found in the sections on optics, acoustics, and habits of animals. There is a 9-page annotated bibliography of books on Greek science.—*C. M. Louttit*.

1568. Fulton, John F. (*Yale U., New Haven, Conn.*) Sherrington's impact on neurophysiology. *Brit. med. J.*, 1947, 2, 807-810.—The research activity of Charles Sherrington in neurophysiology is reviewed from his late twenties up to his Foreword to the 1947 edition of *The Integrative Action of the Nervous System*. Stressed as high points in his research activity are his study before the turn of the century of what he termed the proprioceptive system; his introduction of terms: "synapse," "proprioceptive," "nociceptive"; his mapping in detail of the motor area in cerebral cortex; his studies of reciprocal innervation of antagonistic muscles; his painstaking correlation of each spinal nerve with its specific peripheral activation; his Silliman Lectures at Yale University in 1904 which gave a synoptic view of his researches and which were published in 1906 under the title: *The Integrative Action of the Nervous System*; his work on decerebrate rigidity and on the stretch reflex. Despite all his research on the nervous system Sherrington modestly insisted that the problem of the liaison between the physical and the psychical remains where Aristotle left it more than 2000 years ago.—*F. C. Sumner*.

1569. Lief, Alfred. *The commonsense psychiatry of Dr. Adolf Meyer*. New York: McGraw-Hill, 1948. xvii, 677 p. \$6.50.—Dr. Meyer has never written a systematic treatment of his psychiatric

theories, yet his influence in the history of psychiatry has been very great. In this volume the author presents 52 selected papers together with a biographical narrative. The papers are arranged to illustrate the development of Meyer's thinking rather than by the chronology of their own publication.—C. M. Louttit.

1570. Nohl, Herman. (*Goettingen U., Germany.*) *Der lebendige Herbart.* (The living Herbart.) *Samml.*, 1948, 3, 201-208.—At the occasion of a meeting of progressive educators in Goettingen in March of 1948, Nohl tried to demonstrate the importance of the ideas which the famous German philosopher and pedagogue Herbart still have for our present time. Herbart began his teaching at the University of Goettingen in 1802. Of the greatest importance is his emphasis on the autonomy of education which cannot be only the means for other ends, for instance for a political one. The activity of the growing child is important, not any aims set for him from outside. Each education has to serve the character development.—C. Bondy.

1571. Ritchie, A. D. (*U. Edinburgh, Scotland.*) *Sherrington as philosopher.* *Brit. med. J.*, 1947, 2, 812-813.—While Charles Sherrington was a scientific specialist of the first order, he never in his specialization lost sight of the whole. His preoccupation with the nervous system never blinded him to the life of the mind. Most clearly is this brought out in his Gifford Lectures entitled, *Man on His Nature*, in which he stresses the close association of mental process and bodily functioning and at the same time the difficulty, if not impossibility, of completely identifying the mental with any kind of structure or activity of the body. For Sherrington man is really part of the natural world from which he has developed, yet his mind is in some way distinct and able to judge that world as though from outside by means of its own conception of value. Again in *The Integrative Action of the Nervous System*, while seeing in the reflex the functional unit, he nevertheless sees reflex differing somehow from a penny-in-the-slot-machine and furthermore goes as far as to see the limitations of reflex action.—F. C. Sumner.

1572. Wolters, Albert William. *An autobiography.* *Occup. Psychol., Lond.*, 1948, 22, 180-189.—This is another in the series of autobiographies of prominent British psychologists.—G. S. Speer.

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

1573. Baumgarten-Tramer, Franciska. (*U. Bern, Switzerland.*) *German psychologists and recent events.* *J. abnorm. soc. Psychol.*, 1948, 43, 452-465.—A Swiss psychologist denounces German psychologists for prostituting their science with unparable bias during both world wars. Quotations illustrate their willingness to defend a militaristic, nationalistic view even before Nazi pressure was applied. In 1915 Scheler and Kuelpe made emotional defenses of a morality of power and a hatred of all non-German characteristics. Wundt elaborated on the treachery in English character and the democ-

racy in German military authoritarianism. Between the wars, anti-Jewish prejudice and racism was actively supported. Very few psychologists sympathized with the Jews or defended them, as did Koehler. Arrogant militarism was extolled in psychological journals in the '30s, and even Klages, safe in Switzerland, defended Hitler and denounced humanism. German psychologists show no recognition of social obligation in the search for truth.—C. M. Harsh.

1574. Bousfield, W. A. (*U. Connecticut, Storrs.*) *The use of laboratory sections in the teaching of introductory psychology.* *J. Psychol.*, 1948, 26, 289-298.—The author reviews various ways in which the beginning course is run, its various purposes, and the ways of achieving these purposes. Laboratory, if used, should be primarily to teach habits of objective analysis, secondarily to give some useful information regarding some aspects of personality, of cultural value. The author opposes the formal discipline type of laboratory, and the watering down of the experimental psychology course to an elementary level. 17 references.—R. W. Husband.

1575. Frisby, C. B. *Training the industrial psychologist.* *Occup. Psychol., Lond.*, 1948, 22, 173-179.—Industrial psychology is the science of behavior at work, a special theoretical branch of psychology, rather than applied psychology. On the assumption that the main concern of the industrial psychologist will be with research, a training program is proposed and discussed. This program involves three years and broad psychological training at the undergraduate level, and two years of graduate work leading to a diploma. The first graduate year should be devoted to theory of industrial psychology, and the second year to supervised field work.—G. S. Speer.

1576. LaBarre, Corinne. *Graduate training for educational personnel work.* *Amer. Coun. Educ. Stud., Stud. Pers. Wk.*, 1948, No. 11. v, 54 p.—The returns from a questionnaire concerning training programs in student personnel work, sent to 299 colleges and universities and answered by 271, are analyzed. The text material reviews the history of training for student personnel work, describes the administrative relations of such work, and discusses the needs for such training. In 3 appendixes there are listed institutions offering training in various sorts of personnel work, and detailed descriptions of the work in the 271 institutions reporting.—C. M. Louttit.

1577. Miller, James G. (*U. Chicago, Ill.*) *Future training in clinical psychology.* *Ann. N. Y. Acad. Sci.*, 1948, 49, 913-928.—The writer discusses the problems involved in the future training of clinical psychologists. A specific training program is described which will train clinical psychologists to carry out three major functions: diagnosis, research, and therapy.—S. Ross.

1578. Miller, James G. (*U. Chicago, Ill.*) *The mutual dependency of professional training in psychology and psychiatry.* *Amer. J. Psychiat.*, 1948,

105, 116-123.—There has been such a large increase in the demand for the services of professional personnel qualified to take part in the care of neuropsychiatric illnesses that the medical profession as constituted at present cannot adequately meet it alone. The services of clinical psychologists, psychiatric social workers, and related professions will be needed in very large numbers, as well as the skill of neuro-psychiatrists. The aforementioned fields are discussed and evaluated with reference to needs, approach and conditions of training. Suggestions are made for setting up more effective programs of training in these areas. It is concluded that the closest cooperation between the three primary psychological professions is clearly presaged for the future. Thousands need to be trained in each of them. The educational program, whether in separate graduate departments or in a single one, must be united in a pattern as closely integrated as the cooperative activities in which their graduates will take part. The clinical rather than the academic approach is stressed. Discussion by George E. Gardner.—R. D. Weitz.

1579. Rado, Sandor. (*Columbia U., New York.*) Graduate residency training in psychoanalytic medicine. *Amer. J. Psychiat.*, 1948, 105, 111-115.—The history of training in psychoanalysis is reviewed indicating the emphasis placed on "Lehranalyse"—didactic analysis, as the very foundation of training. The author writes of the establishment and development of the psychoanalytic clinic for training and research at Columbia University including the facilities available. The Columbia plan of graduate residency training in psychoanalytic medicine, based on these facilities, is outlined. 10 references.—J. Barron.

1580. Sibley, Elbridge. The recruitment, selection, and training of social scientists. New York: Social Science Research Council, 1948. (Bull. 58). xv, 163 p. \$1.50.—Description of educational practices and factors unfavorable to the development of social scientists some of which are the result of training natural at the expense of social scientists within the limitations of faculty, facilities, and funds available to educational institutions. The author states that "research training as it is widely practiced in graduate schools today fails, judging by its end product, to achieve its purpose. . . ." The function of national fellowships in presently helping the most promising students and in stimulating revisionist trends within the institutions themselves is indicated.—J. C. Franklin.

1581. Sokolov, M. V. *Prepodavanie psichologii v shkolakh goroda Moskvi.* (Teaching psychology in Moscow schools.) *Sovetsk. pedag.*, 1948, No. 3, 62-76.—Psychology and logic were introduced into the Soviet middle schools for the first time in the fall of 1947. In order to see how the new course of instruction in psychology was getting on, the Academy of Pedagogical Sciences sent a team to observe the work of 15 of the 47 instructors of psychology in the Moscow schools. They were satisfied in general with

the way the material got across to the students, but they noted certain difficulties which led them to these conclusions: (1) All instructors who have had only the two months course should get a full two year course. (2) The number of hours of instruction should be raised from 33 to 50. (3) The experiment of teaching psychology in the 9th grade should be tried. (4) A conference for the exchange of teaching experience should be organized. (5) A short treatise on questions of teaching psychology should be put out. (6) Apparatus and visual aids should be made available.—R. A. Bauer.

1582. Wilson, N. A. B. Training the industrial psychologist. *Occup. Psychol., Lond.*, 1948, 22, 163-172.—The proposed undergraduate training is a one-year introductory course; a two-years basic course required of all students; and an honors examination with one or two papers on specialized topics. A two-year graduate course appears desirable but not likely at present, therefore a one-year graduate course is suggested, half of the time to be given to theoretical studies, and the other half to supervised practical work in several institutions.—G. S. Speer.

PHYSIOLOGICAL PSYCHOLOGY

1583. Freeman, G. L. *The energetics of human behavior.* Ithaca, N. Y.: Cornell University Press, 1948. vi, 344 p. \$3.50.—The basic thesis of this work is "that all behavior is an attempt to preserve organismic integrity by 'homeostatic' restorations of equilibrium. . . ." An effort is made to establish the continuity between the organism's overt reactions and the self-regulatory processes of organ systems. The author is critical of the conventional avoidance of basic philosophical problems and theoretical constructions, pointing out that no science can escape the need for theory. An extension of Cannon's principle of homeostasis is applied to behavioristic theory, to related motivated behavior, to the action of organ systems. It is claimed that description of total neuromuscular homeostasis will offer direct measures of dynamic behavior wholes which will ultimately "outfield" the field theories. One example: "set-expectancies are tentative and antecedent homeostatic adjustment acts, developed in response to minimally displacing stimulus cues and preparing the channelization of discharge through some particular response outlets which, if not so prepared, would function only through a greater displacement to general equilibrium." 151-item bibliography.—J. W. Bowles.

1584. Rohracher, Hubert. (*U. Vienna, Austria.*) *Schwingungen im menschlichen Organismus.* *Anz. Phil.-Hist. Kl. Akad. Wissensch. Wien*, 1946, 18, 230-245.—In the course of his electroencephalographic work, the author discovered that the human body constantly produces mechanical vibrations with a frequency of 6-13 sec. and with an amplitude of 1-6 μ . A piezo-electric pickup, if in touch with any part of the human body and connected to a suitable amplifier, will record these vibrations. They

have been found in all subjects examined, adults and children alike. In children, the amplitude is lower ($1-2 \mu$) than in adults ($3-6 \mu$). The frequency, however, is independent of age, an argument rating against any direct connection between these vibrations and the α -activity of the electroencephalogram whose frequency is much lower in infants. The vibration was demonstrated under conditions of complete muscular relaxation; increased muscle tension increases the amplitude up to 10-fold and the oscillations develop into a visible tremor. The frequency is unaffected by the degree of muscular tension. Body vibration is transmitted, e. g., through distance of 3 m. from the subject. For lack of suitable apparatus, no experiments could be made concerning transmission of the body vibrations through air. In the discussion, the author speculates on the significance of the findings in psychology and neurophysiology.—(Courtesy of *Biol. Abstr.*)

NERVOUS SYSTEM

1585. Funkenstein, Daniel H. (*Harvard Med. Sch., Cambridge, Mass.*), Greenblatt, Milton, & Solomon, Harry C. Autonomic nervous system changes following electric shock treatment. *J. nerv. ment. Dis.*, 1948, 108, 409-422.—A test designed to predict the clinical effects of electric shock treatment was tried out on 50 patients at Boston Psychopathic Hospital. After injection of epinephrine and mecholyl on successive days, blood pressure changes were studied. Results permitted classification of patients into 7 groups as regards blood pressure action and into four classes on the basis of psychophysiological response. Autonomic patterns are not specific for any diagnostic category but certain interrelationships are discussed.—N. H. Pronko.

1586. Granit, Ragnar. (*Karolinska Institutet, Stockholm, Sweden.*) Nerve fibre interaction in the roots. *Acta psychiat., Kh.*, 1947, Suppl. 46, 114-120.—Local cooling of a spinal nerve root had the effect of augmenting the effects of stimulation of an adjacent root, thus demonstrating the possibility of interaction between two adjacent roots. The possibility of a relationship between the observations and the clinical symptoms found in spinal root compression is mentioned.—A. L. Benton.

1587. Heinemann, A. Ueber die Beziehungen zwischen Chronaxie und Akkommodationskonstante bei Reizung der Nerven mit linearen Stromanstieg. (On the relations between chronaxy and accommodation-constant in the stimulation of nerves with a current increasing in linear fashion.) *Pflug. Arch. ges. Physiol.*, 1942, 246, 446-456.—On the motor nerve of a frog, the linear constant of Fabre, measuring the accommodation, is on an average of 27.5 times the chronaxy (between 15 and 60 times). With aneurotonus augmenting the polarization (which shortens the chronaxy and elevates the rheobase), the relation is increased, and decreased by catelectonus.—(Courtesy of *Année psychol.*)

1588. Luque, Oscar. (*Faculty of Medicine, Cordova, Spain.*) Sobre un caso de oftalmoplejia en una neuro-sífilis; disociación entre la motilidad voluntaria y la refleja. (Concerning a case of ophthalmoplegia in neuro-syphilis; dissociation between voluntary and reflex motility.) *Rev. argent. Neurol. Psiquiat., Rosario*, 1946, 11, 24-30.—A case is reported in which a 53-year old man suffering from neurosyphilis has partial paralysis of ocular motor nerve in such wise that voluntary and reflex motility of eyes are dissociated. The probable nerve-pathways involved in voluntary and reflex motility of eyes are discussed.—F. C. Sumner.

1589. Nielsen, J. M. Ideational motor plan; rôle of the parieto-occipital region in planned acts. *J. nerv. ment. Dis.*, 1948, 108, 361-366.—An analysis of the Parkinsonian and ideo-kinetic apraxia syndromes as well as of the known functions of the parietal and occipital lobes, permits the synthesis of these facts toward a conclusion to the effect that "the posterior association area of Flechsig is the parieto-occipital association area for coordination of all sensory impulses necessary in all intelligent planned acts."—N. H. Pronko.

1590. Noell, Werner K. The recovery of the brain from anoxia after administration of analeptic drugs; electroencephalographic studies on rabbits. *J. Aviat. Med.*, 1948, 19, 337-345.—EEG recordings from rabbit brains show two phases during recovery from anoxia. During the first phase cortical activity reappears and is occasionally built up to higher than normal responses. The second phase shows patterns of low voltage with predominantly fast-wave components. The appearance of certain kinds of spiked waves during the second phase leads the author to conclude that a preconvulsive state develops after revival from anoxia. Injections of metrazol during resuscitation from anoxia are more effective in eliciting major cortical convulsions than are similar injections in control animals. Caffeine sodium benzoate in large doses, and probably picrotoxin, produce effects similar to metrazol. Neither nikethamide (coramine) nor amphetamine sulfate (benzedrine) produce convulsions.—A. Chapanis.

1591. Richter, D., & Dawson, R. M. C. (*Neuropsychiat. Res. Centre, Whitchurch Hosp., Cardiff, S. Wales.*) Brain metabolism in emotional excitement and in sleep. *Amer. J. Physiol.*, 1948, 154, 73-79.—"The lactic acid content of the rat brain is reduced in sleep and increased in emotional excitement. The rise in lactic acid . . . is not due to concomitant muscular activity. . . . The rise in lactic acid in the brain in emotion is a transient effect, followed by a rapid return to normal when the stimulus [dropping from side to side in a glass beaker] is discontinued."—R. B. Bromiley.

1592. Swinyard, Ewart A., & Toman, James E. P. (*U. Utah, Salt Lake City.*) Effects of alterations in body temperature on properties of convulsive seizures in rats. *Amer. J. Physiol.*, 1948, 154, 207-210.—"Characteristics of experimental [electroshock] seizures were studied in rats whose body

temperatures were altered by exposures to extreme environmental temperatures. Seizure threshold was increased, seizure duration reduced and post-seizure recovery hastened by increased body temperature, and conversely changed by decreased body temperature."—R. B. Bromley.

1593. Walsche, F. M. R. (*National Hosp. Nervous Diseases, Queen Square, London.*) Physiology of the cerebral motor cortex: the contribution of clinical study. *Brit. med. J.*, 1947, 2, 830-832.—The hypothesis of punctate localization of motor functions in cerebral cortex adhered to by the experimental neurophysiologists is contrasted with the hypothesis of multiple and overlapping representations confirmed by clinical observation and by the recent work of two American physiologists, Murphy and Gellhorn.—F. C. Sumner.

[See also abstract 1568.]

RECEPTIVE AND PERCEPTUAL PROCESSES

1594. Bartorelli, C., & Wyss, O. A. M. Kinematographische Analyse der labyrinthären postrotatorischen Körperdrehreaktionen. (Cinematographic analysis of post-rotary labyrinthine reactions of body rotation.) *Pflug. Arch. ges. Physiol.*, 1942, 245, 511-523.—Researches on rabbits and cats subjected to rotations around three principal axes in a special cage in which they are immobilized and liberated at the end of the rotation or else only their head is liberated. Durations of 10 to 30 sec. of rotation were utilized (with optimum of 20) and angular speeds of 360° to 720° per second. Modifications of reactions after bilateral labyrinthectomy have shown the role of the labyrinth (which is responsible for the behavior movements and for the cephalic and ocular nystagmus after rotation around the crano-basal axis). After rotation around the bitemporal axis the reversement persists after ablation of the labyrinths, while the movements of rotation or rotatory nystagmus after the rotation about the fronto-occipital axis are abolished.—(Courtesy of *Année psychol.*)

1595. Beebe-Center, J. G., & Waddell, D. (*Harvard U., Cambridge, Mass.*) A general psychological scale of taste. *J. Psychol.*, 1948, 26, 517-524.—This is an extension of a previous study by Lewis, and deals with definition of a general psychological scale of taste strength. It is shown that cross qualitative matches with respect to subjective strength are possible in the field of taste. A 1% aqueous solution of sucrose is chosen as the unit of this scale, and called a "gust." A log scale is shown for solutions of sucrose, quinine sulfate, tartaric acid, and sodium chloride.—R. W. Husband.

1596. Beusekom, G. van. Some experiments on the optical orientation in *Philanthes triangulum* Fabr. *Behaviour*, 1948, 1, 195-225.—The cues used by the Sphegid wasp in locating her nest-hole were systematically varied. Pine cones and other objects

were arranged in a variety of patterns around the nest-hole and nearby "sham nests" and the direction of choice was noted. The results indicated that orientation is not to the individual elements of any given beacon pattern but to the configuration under which training has occurred. "For the wasp the nest-hole . . . does not lie 'near the fir-cones,' but 'in a distinct place' in relation to a distinct 'configuration' of fir-cones. The wasp pays attention to the 'configuration' as well as to the properties of the fir-cones, but former preponderates." 21 references.—L. I. O'Kelly.

1597. Harman, J. B. (*St. Thomas's Hosp., London, Eng.*) The localization of deep pain. *Brit. med. J.*, 1948, 1, 188-192.—This paper deals with the laws determining where a deep pain is felt, or, in other words, with its local sign. It is shown that deep pain is not felt in any particular structure of the body, such as viscera, or body wall but rather that the localization is best regarded as a projection from the brain, that the place where a pain is felt is determined as much or more by the anatomy of the cortex as by the structure of the limb or part of the body in which it seems to be. Evidence is cited from the literature and the author's own observations of referred pains in phantom limbs and of experiments with "novocain" block. The explanation runs along these lines: All sensations are normally felt somewhere, and deep pain must therefore be an allodynia; these latter "pains from nowhere" are projected into the perceived parts of the body; they have a segmental basis derived from the fixed structures of the cortex. Their locality is further defined within these crude limits according to the individual characteristics of the body image; the sensation of deep pain does not depend on any peripheral change in the part where it is felt but on the normal stimuli coming from the part, for without these the place would remain unperceived.—F. C. Sumner.

1598. Lewis, Douglas R. (*Harvard U., Cambridge, Mass.*) Psychological scales of taste. *J. Psychol.*, 1948, 26, 437-446.—This paper describes an attempt to construct psychological scales of taste which will fulfill the requirements of ratio scales. Observers selected, from sets of comparison concentrations of sodium chloride, sucrose, quinine sulfate, and tartaric acid, ones most nearly representing one-half the subjective strength of standard concentrations. This was repeated at several levels of concentration. Data support Stevens' hypothesis "that size of jnd's changes when discrimination is effected by addition of excitation to excitation already present, and remains constant when discrimination is effected by a change in form, distribution, or location of excitation."—R. W. Husband.

1599. Lichtenstein, P. E. (*Indiana U., Bloomington.*) The relative sweetness of sugars: sucrose and dextrose. *J. exp. Psychol.*, 1948, 38, 578-586.—"1. A modified method of limits involving successive comparison is found to yield reliable results when applied to the problem of relative sweetness. 2. Sweetness values of dextrose when based upon

sucrose as a standard equal to 100 are found to vary with the concentration. At a concentration of sucrose of 10 percent, dextrose has a relative sweetness value of 65. At a concentration of sucrose of 25 percent, the dextrose sweetness value rises to 71 and at a sucrose concentration of 40 percent, dextrose reaches a sweetness value of 83. 3. The relative sweetness of a two-thirds sucrose, one-third dextrose mixture is found to be very close to a value obtained by calculation from the separate sweetness values of the two sugars at a concentration equal to that of the mixture. 4. Qualitative changes in dextrose are apparent at high concentrations. Such changes suggest that sweetness may not be the only taste quality influencing S's judgments."—D. W. Taylor.

1600. MacGregor, E. G. (Cambridge U., England.) *Odour as a basis for orientated movement in ants. Behaviour*, 1948, 1, 267-296.—This is a presentation of manuscript notes left by Captain MacGregor, who was killed during the last war. After a review of the literature on orientation and a description of artificial nests and tracking techniques observations of normal paths of *Myrmica ruginodis* are reported. The unburdened worker travels a "continuously looping course" while the burdened worker walks "in a straight line with intermittent loops." "Experiments . . . demonstrate that the continuously straight homeward course is formed from such straight lines and that the loops are suppressed, and a good direction given, by isolated small spots of orientated odour." Continuous odor trails are the result of an accumulation of the odor spots. "It is suggested that the cause of complication in ant behaviour is to be sought in redundancy of senses; the ant can perform the same action equally well by use of one sense, or of a number of senses." 39-item bibliography.—L. I. O'Kelly.

1601. Spector, Benjamin. (Tufts Coll., Medford, Mass.) *Neuroanatomic mechanisms underlying vertigo and nausea. Bull. New Engl. med. Cent.*, 1948, 10, 145-154.—Neural mechanisms involved in the mediation of vestibular dysfunctions and related reflexes are described.—A. C. Hoffman.

[See also abstract 1691.]

VISION

1602. Baillart, P. *La fatigue et l'usure de la rétine.* (Fatigue, wear and tear of the retina.) *Pr. méd.*, 1943, 51, 136-137.—When one regards in a prolonged fashion a white surface, the apparent brightness diminishes. If one does not experience a sensation of fatigue, that is due, according to the author, to the incessant movements of the eye, constituting periods of repose, and to blinkings which occur 7 to 8 times per minute. Our cells would repair themselves before we sensed fatigue of them. But, in case of overwork, the reparation is no longer effected so well, and after having regarded a pencil of light there is produced on desiring to read a text an initial scotoma which is dissipated in 30 seconds

in the child, in 60 seconds in the aged. After a certain luminous irradiation there is observed a dispersion of the Nissl bodies, followed by a concentration with repose, but it is above all in the external cells that is effected the reparation (regeneration of the purple and of the sensitive substance of the cones). The pressure of the photons bombarding the eye, in non-luminous radiations, acts also on the retina which is protected in part by their absorption in the ocular media.—(Courtesy of *Année psychol.*)

1603. Berry, Richard N. (Indiana U., Bloomington.) *Quantitative relations among vernier, real depth, and stereoscopic depth acuities. J. exp. Psychol.*, 1948, 38, 708-721.—3 Ss were presented with 3 visual discrimination situations involving vernier, real depth, and stereoscopic depth. Test rods were placed vertically above one another, separated by 3.6", 20.1", 44.6", 133.7", 312.0", and 891" of visual arc. The method of constant stimuli was used, with 4 sec. stimulus duration allowed for each judgment. It was found that thresholds in the vernier situation decreased from the widest to the narrowest separation, with monocular and binocular thresholds about the same. Real depth thresholds varied less, and were minimal at intermediate separations. It is felt that real and stereoscopic depth thresholds are essentially identical, and are "for the most part, too low to be accounted for by a simple summation of the two separate monocular, vernier components."—R. B. Ammons.

1604. Bischler, V. (Ophthal. Clinic, Geneva, Switzerland.) *La triplolie binoculaire. Ophthalmologica*, 1948, 116, 254-255.—A particularly interesting case of binocular triplopia is presented in abstract form, as given at the 40th general meeting of the Swiss Ophthalmological Society at Locarno in October 1947.—S. Ross.

1605. Bonaventura, Enzo. (U. Jerusalem, Palestine.) *Nuove ricerche sull'acuità stereoscopica e la percezione della distanza.* (New researches on stereoscopic acuity and perception of distance.) *Riv. Psicol.*, 1947, 43, 97-110.—The apparatus which has been traditionally used since Helmholtz in experimentation on stereoscopic acuity and perception of distance consists essentially of three slender poles, the two lateral ones being stationary and the middle one being movable by means of a string to the subject in order to bring it into a plane with the two lateral poles. With such an instrument it has been thought demonstrated that depth perception is solely due to binocular parallax i.e., angular difference between the positions of the image. The author's experimentation convinces him that in this apparatus several other factors such as apparent thickness of the poles, the illumination of the borders, shadow effects, clearness of contours, etc., are more responsible than binocular parallax for the stereoscopic discrimination. With a view to eliminating these secondary factors and to studying only the effect of the binocular parallax, the author has constructed an apparatus in which the two lateral poles are movable by the subject and the middle pole, in

reality a narrow black vertical card, is stationary. The movable poles are in fact not poles but rather cards of uniform color of low saturation. The subject looks through two apertures in a rectangular box. The results obtained from this and the older apparatus suggest to the author a revision of the best known theories on distance and depth perception on the basis of a new conception connecting the Gestalt theory with the genetic theory.—*F. C. Sumner*.

1606. Carlson, Joseph J. Normal and anomalous projection—an elaboration. *Optom. Wkly.*, 1948, 39, 1953-1958.—Both anomalous and normal binocular vision are considered products of a common physiological principle determining the perception of objects innervating corresponding retinal areas or disparate areas; diagrams are included.—*D. Shaad*.

1607. Carpenter, A. (*Psychological Laboratory, Cambridge U., Eng.*) The rate of blinking during prolonged visual search. *J. exp. Psychol.*, 1948, 38, 587-591.—A Matthews inkwriting oscilloscope, fed by a five stage battery operated amplifier, was employed to record the blinking of each of 20 *Ss* during a two-hour period. During this period, each *S* was engaged in the Clock Test devised by Mackworth to study the efficiency of visual watchkeepers or look-outs. The fact that by the end of the period the mean rate of blinking had increased 43% "is submitted as evidence that the rate of blinking can be used as a criterion of visual efficiency."—*D. W. Taylor*.

1608. De Gramont, A. La grandeur relative des deux images rétinianes. (The relative size of the two retinal images.) *Rev. Opt.*, 1942, 21, 1-14.—In the anisometropias (the article holds equally valid for essential aniseiconia) the inequality of the images can render their fusion painful, in fact, impossible (if the difference exceeds 4 to 5%; one eye then assures far vision; the other, near vision,—with at times strabismus). In order to remedy this, it is necessary to know the relative correction in size which satisfies the subject. Three apparatuses are described: that of the Dartmouth school (binocular adjustment of 4 groups of black spots); an analogous apparatus (alinement of verticals) realized independently by the author; another apparatus considered more precise but reserved for subjects who have not lost stereoscopic vision (they have to place 2 verticals at the same apparent distance in binocular vision). The two "logoscopes" of the author give directly the relation which permits calculation of the corrective lenses, owing to which the subject will recover his binocular vision. Two cases are given as examples.—(Courtesy of *Année psychol.*)

1609. Dévé, Ch. Le strabisme invisible. (Invisible strabismus.) *Rev. Opt.*, 1942, 21, 132-139.—The author relates his own case, in the intention that those similar to him may also examine themselves and bring about a correction of themselves. He perceived one day while looking at the dial of a timepiece, that his left eye was completely neutralized in far vision. Having succeeded in deneutralizing this eye, he saw passers-by double and he had to re-

learn to neutralize himself. This slight strabismus was corrected by means of prismatic lens of suitable disparity. Invisible strabismus is easy to detect. One obstructs one eye; if the field appears to be displaced, it is that the other eye was neutralized by reason of a defect in convergence. The presbyopia of convergence should be corrected.—(Courtesy of *Année psychol.*)

1610. Durup, G., & Piéron, H. L'équation de Rayleigh et la dissociation des valences chromatique et lumineuse. (The equation of Rayleigh and the dissociation of chromatic and luminous values.) *Rev. Opt.*, 1943, 22, 224-231.—A. Polack attributes to an abnormal relative luminosity of colors the anomalies in the equation of Rayleigh. The values obtained by the present authors on 13 normal subjects in the equation of Rayleigh and in the equalization of green and red (by means of dazzle) present no correlation, which comes to the support of results which show the independence of luminous and chromatic functions in the normal. The values are compared with those of other authors, notably in the equation of Rayleigh, where the distribution of 23 normals is compared with those of numerous subjects of Houston, of Collins, and of Hailwood and Roaf.—(Courtesy of *Année psychol.*)

1611. Gengerelli, J. A. (*U. California, Los Angeles.*) Apparent movement in relation to homonymous and heteronymous stimulation of the cerebral hemispheres. *J. exp. Psychol.*, 1948, 38, 592-599.—"Two pairs of visual stimulus points were presented to *Ss* under conditions producing the phenomenon of apparent movement, but in such wise that two radically different forms of seen movement were available, *viz.*, vertical and horizontal. By altering the position of the visual fixation point relative to the points in question, an attempt was made to determine whether homonymous cerebral excitations were more intimately interrelated than heteronymous cerebral excitations. . . . In the case where both homonymous and heteronymous forms of cerebral excitation were simultaneously present it was found that the form of the seen movement was predominant which had its base in the homonymous cerebral excitations. On the other hand, when only homonymous cerebral excitations were present, there was no clear predominance of one type of movement over the other. It is concluded that two excitations existing in the same cerebral hemisphere are more strongly interrelated than two excitations existing in different cerebral hemispheres."—*D. W. Taylor*.

1612. Hirschfelder, Max. The myopic patient. *Eye, Ear, Nose Thr. Mon.*, 1948, 27, 464-468.—Optometric and psychological aspects of the treatment of myopic patients (both child and adult) are discussed.—*A. C. Hoffman*.

1613. Jäger, A. Grenzen der Sehschärfe. (Limits of visual acuity.) *Klin. Mbl. Augenheilk.*, 1947, 112, 244-251.—Studies of a dark-adapted eye have shown that fluctuations in visual acuity occur within the visual field as one approaches the acuity threshold.

This cannot be eliminated by undertaking the experiment in complete darkness, but rather by using the same brightness as when making the visual tests afterwards. In this way it is possible to obtain essentially constant values for visual acuity. The phenomenon known as *tapetum lucidum*, found in many animals, probably also produces such a weak, diffuse illumination in the retina, and night vision operates on a similar principle. Another purpose for this might be the more efficient utilization by each single rod of the light stimulus which thus passes through the retina twice as it is reflected from behind.—*P. L. Krieger*.

1614. Kalaidzhiev, A. *Fiziko-khimiia na cvetouseshchaneto; opredelaine na elektrokhimichnii i khimichen potencial v retinata*. (Physical chemistry of color vision; chemical potentials in the retina.) *Blgar. klin.*, 1948, 19(3), 172-174.

1615. Katz, J. *Zur Frage der Dämmerungs- und Nachtmynopie*. (The question of twilight myopia.) *Klin. Mbl. Augenheilk.*, 1947, 111, 219-223.—It is possible to consider so-called twilight myopia as a resultant of chromatic aberration and to group it with Purkinje's phenomenon as chromatic myopia. There is a further kind of decreased distance point refraction with the distant point under low illumination which is dependent upon color. The chromatic myopia for an emmetrope is for green rays about .5 diopter, for blue rays about 1 diopter. The decreased refraction due to the balance of accommodation in deep twilight and night vision is about 2 diopters.—*P. L. Krieger*.

1616. Le Grand, Y. *Études sur la vision nocturne*. (Studies on night vision.) *Rev. Opt.*, 1942, 21, 71-87.—The question of luminosity constants in night vision is discussed in this paper, with suggestions given for determination and computation. A table of luminosity coefficients in night vision is presented.—(Rewritten from *Année psychol.*)

1617. Magidot, A. *Daltoniens*. (Daltonians.) *Pr. méd.*, 1942, 50, 26-29.—Fragility of color sensations manifests itself following occipital traumas. Red and green disappear with affections of the fibres and of the optic chiasm, blue and yellow in retinal affection (detachment, pigmentary retinitis), in congenital hemeralopia in which there is an absence of rods, and in night-blindness. In ocular compression, arresting the circulation, the loss of color precedes blindness (a red or green bulb is seen white). After an examination of the theories of Young-Helmholtz and Hering and of the objections to which they give rise, the author concludes that the trichromatic schema is still that one which adapts itself best to the facts and does not clash with any decisive objection.—(Courtesy of *Année psychol.*)

1618. National Research Council, Committee on Aviation Psychology. *An investigation of the relationship between visual ability and flight performance*. Washington: Civil Aeronautics Administration, Div. of Res., 1948. Rep. No. 78. xii, 123 p.—This is the full research report of which Viteles' article (see 22: 2793) is a condensation.—*A. Chapanis*.

1619. Pirenne, M. H. (U. London, Eng.) *Vision and the eye*. London: Pilot Press Ltd., 1948. xx, 187 p. 12s. 6d.—Following a concise formulation of the basic facts about the eye and its properties, the author presents a discussion, addressed to the non-specialist, of the quantum nature of light as a factor in determining visual response, visual acuity in insects and man, color vision, and the relation between eye and brain. There are more than 100 illustrations.—*A. J. Sprow*.

1620. Shepard, Carl F. (Northern Illinois Coll. of Optometry, Chicago.) *Measuring ability to see*. *Optom. Wkly.*, 1948, 39, 2089-2092.—A formula is presented for measuring the ability to see when certain test conditions are provided.—*D. Shaad*.

1621. Siegel, Harold H. (Niles, Mich.) *A dynamic-field approach to visual diagnosis and training*. *Optom. Wkly.*, 1948, 39, 1883-1886; 1921-1924.—The Gestalt approach to visual perception is preferred to the earlier static theory of image formation.—*D. Shaad*.

1622. Studnitz, G. v. (U. Halle, Germany.) *Über die Beeinflussung der menschlichen Dunkeladaptation durch Vitamine*. (The influence on human dark adaptation of vitamins.) *Klin. Mbl. Augenheilk.*, 1947, 111, 154-173.—A daily dose of emulsified Vogan oil with high vitamin content (40,000, 100,000, 250,000 units per person per day), continued for periods up to 3 weeks, increased the extent and rapidity of dark adaptation in personnel with normal night vision. The maximum effect was a decrease of initial threshold by 12 times, and a final threshold after 45 minutes in the dark, by 42 times the norm. The effect increased proportionately the amount of vitamin A taken, with a starting period for complete development always evident. This is longer with higher daily doses than with smaller, e.g., 6 days with 40,000 units and 16 days with 250,000 units. The effect is always highest 6 to 7 hours after the last dose, and decreases as the dosage period is ended, reaching a norm within at most 3 weeks.—*P. L. Krieger*.

1623. Terrien, J. *Asymétrie de la perception visuelle des plages photométriques*. (Asymmetry of the visual perception of photometric regions.) *Rev. Opt.*, 1943, 22, 1-8.—With a good contrast photometer, the probable error amounts at most to .2%. But if one interchanges the two halves of the apparatus (or the semi-retinas, since the mechanical error is very small), the measure can vary by 2%. 9 observers out of 11 overestimate the contrast from the right, 2 that from the left. The effect is in the same direction for the 2 eyes, but is not symmetrical. In one observer, the error has varied between .4 and 1.14% in the course of a year, with a tendency to increase. Likewise a dissymmetry for the colors (blue and red); the personal error appears without correlation with the preceding,—no more than the error (geometric and not photometric) of bisection of the interval between 2 marks. At the International Bureau of Weights and Measures, the author employs always, in addition to mechanical permuta-

tions, the method of "double weight"; several observers obtain thus, in homochromous photometry, the agreement of the two lamps to almost .001.—(Courtesy of *Année psychol.*)

1624. Veniar, Florence Abt. (1 *Seventy-Fourth St., Brooklyn 9, N. Y.*) Difference thresholds for shape distortion of geometrical squares. *J. Psychol.*, 1948, 26, 461-476.—Squares of four basic sizes were compared with distorted squares, presented tachistoscopically. The average difference threshold for the perception of shape distortion was 1.4% of the original, for all sizes. No variation in this appeared with changes in illumination intensity.—R. W. Husband.

1625. Wendland, John P. (*U. Minnesota, Minneapolis.*) Effect of muscular exercise on dark adaptation. *Amer. J. Ophthal.*, 1948, 31, 1429-1436.—Whereas light exercise has essentially no effect on the rate of dark adaptation and only a slight tendency to produce a biphasic effect on the rod threshold, heavy exercise causes a marked biphasic response and a tendency to elevation of the thresholds for the total adaptation curve. 15 references.—D. Shaad.

1626. Witkin, H. A. (*Brooklyn Coll., N. Y.*), & Asch, S. E. Studies in space orientation. III. Perception of the upright in the absence of a visual field. *J. exp. Psychol.*, 1948, 38, 603-614.—"With the position of his body varied systematically, the S, in a completely darkened room, was required to adjust a luminous rod to the true vertical and horizontal. Judgments were found to be very accurate when the body was upright, but errors appeared as soon as the body, or even the head alone, was tilted. The largest errors occurred when the body was horizontal, which was the most extreme displacement of the body employed. In addition, when the body was tilted, successive judgments proved to be quite variable. It is thus indicated that postural factors provide an adequate and stable basis for judging the vertical and horizontal when the body is upright, but not when the body is tilted. The errors made with head or body tilted were systematic in their direction. With small tilts, the rod tended to be displaced opposite to the body, and with large tilts, toward the body. These are the long-known E-phenomenon and Aubert-phenomenon, respectively. These phenomena are eliminated at once upon the introduction of a visual field." (see 23: 48).—D. W. Taylor.

1627. Witkin, H. A. (*Brooklyn Coll., N. Y.*), & Asch, S. E. Studies in space orientation. IV. Further experiments on perception of the upright with displaced visual fields. *J. exp. Psychol.*, 1948, 38, 762-782.—"The effects of visual frameworks of different tilt and of different bodily positions upon perception of the upright were investigated in 53 adult Ss. The visual field consisted of a simple luminous frame contained in a completely darkened room. Within the frame was a luminous rod which the S had to set to the vertical and horizontal. The frame was tilted 28° right, 28° left or was erect; and

the body was either erect or tilted 28° left. Tilting of the frame caused a shift in the perceived upright in the direction of the frame. The influence of the frame was smaller with body upright than with body tilted." There were marked individual differences in performance with modes of perceiving the upright characteristic of the individual involved. "The 'weak' structure of the visual framework used resulted in smaller errors, as compared with previous studies, when the rod had to be set to the upright under the influence of the tilted frame. At the same time, the framework was relatively unstable, the top coming to be perceived as a side, and so on." It was concluded that ". . . the effect of the visual field upon the perceived upright tends to be stronger and more consistent, the more richly articulated the field."—R. B. Ammons.

1628. Zegers, Richard Theodore. (*Fordham U., New York 53.*) Monocular movement parallax thresholds as functions of field size, field position, and speed of stimulus movement. *J. Psychol.*, 1948, 26, 477-498.—An apparatus and procedure were developed to test the influence of various parameters on the differential angular velocity threshold, and its associated depth difference threshold, in monocular movement parallax discrimination. Variables were rate of movement, size of field, angle of separation between stimuli, and conditions of fixation. Increase in speed of stimulus movement resulted in an increase in the differential angular velocity threshold; and increase in the horizontal dimension of the field results in a decrease in threshold.—R. W. Husband.

[See also abstracts 1588, 1669.]

AUDITION

1629. Békésy, Georg v. (*Harvard U., Cambridge, Mass.*) Vibration of the head in a sound field and its role in hearing by bone conduction. *J. acoust. Soc. Amer.*, 1948, 20, 749-760.—"In a sound field the head is set into forced vibrations, and the vibrations are sometimes heard by bone conduction. For clinical purposes it is important to know the magnitude of these vibrations of the head so that, in cases of partial deafness, the roles of air conduction and bone conduction can be understood. The pattern of the head vibrations and the velocity of the deformation waves traveling along the bony wall of the skull were measured. . . . In the course of the experiments, a new method of calibrating a vibration pick-up with a sound level meter was developed. It was found possible to construct an earphone that reduces the amount of 'cross-hearing' to a very low value. With this earphone, hearing thresholds can be measured in many cases without using noise to mask the ear with the better hearing, even though the difference between the sensitivities of the two ears is greater than 40 db. It is shown that the maximal sound insulation that can be obtained with an ear plug is determined by the elastic forces acting between the skin of the ear canal and the bony wall of the ear canal."—W. R. Garner.

1630. Davis, Hallowell. The articulation area and the social adequacy index for hearing. *Laryngoscope, St Louis*, 1948, 58, 761-778.—The proposed "social adequacy index" for hearing is the average of the percentage of words heard correctly at 55 db. (faint speech), 70 db. (average speech intensity level), and 85 db. (loud speech). The results of several speech tests may be used to determine the percentage values—lists of spondee words, simple sentences, two-digit numbers, and Threshold of Intelligibility for Connected Discourse. The index may be calculated by means of a table provided or, less conveniently, from the cutting scores on an "articulation curve" (% of words correctly understood against sound pressure in decibels). Difficulty in social situations begins at SAI = 67; the "threshold of social adequacy" is at SAI = 33.—A. C. Hoffman.

1631. Egan, James P. Articulation testing methods. *Laryngoscope, St Louis*, 1948, 58, 955-991.—Procedures for the measurement of the intelligibility of speech are discussed. The available test items described are nonsense syllables, the monosyllabic word lists (PB lists) developed by the Psycho-Acoustic Laboratory (20 lists of 50 words each are presented in the Appendix), spondaic word lists, and sentence lists. Problems of conducting articulation tests considered include: selection of testing personnel, importance of training and fatigue, selection of complementary equipment, ambient noise conditions, intensity of received speech, use of a carrier sentence, and methods of scoring.—A. C. Hoffman.

1632. Friedman, Orel. Blast injuries of the ear. *Arch. Otolaryng., Chicago*, 1948, 47, 471-484.—One hundred military cases of blast injury were studied—clinical histories of 13 patients are presented. Audiometric and whispered voice tests indicate slight loss in 71 of the cases with least loss at the frequencies, 512, 1024, and 2048. When hearing loss was minimal, a tonal dip at 4096 cycles and a slight depression of the audiometric curve at frequencies below 512 were observed. When damage was more severe, losses to frequencies above 2048 were noted.—A. C. Hoffman.

1633. Henry, Franklin M. (U. California, Berkeley.) Discrimination of the duration of a sound. *J. exp. Psychol.*, 1948, 38, 734-743.—"Limens for discrimination of the duration of a sound ranging from 32 to 480 msec. were determined for 11 Ss. Stimulus intensity was varied from 20 to 80 db; pitch was varied from 125 to 2000 cycles. Somewhat more than 20,000 individual judgments were obtained. The average S could discriminate approximately 14 percent change in the duration of a 500 cycle tone of moderate intensity. Discrimination was only about half this good for the shortest duration studied; it was also poorer for faint sounds and low-pitched sounds. The effects of stimulus alteration were consistent with a theory that presumes an integration of stimulus intensity with respect to duration. Perception of differences in

the duration of sound stimuli shorter than a half-second can be considered as fundamentally a discrimination of intensity differences."—R. B. Ammons.

1634. Hirsh, Ira J., & Pollack, Irwin. (Harvard U., Cambridge, Mass.) The role of interaural phase in loudness. *J. acoust. Soc. Amer.*, 1948, 20, 761-766.—When tones are presented to a listener binaurally against a background of noise which is in phase at the two ears, the loudness of the tone depends on the interaural phase relations. The binaurally heard tone is louder when the tones at the two ears are out of phase than when they are in phase. This effect occurs only when the tone is within 20-30 db of the masked threshold, and at frequencies below about 2000 cps. The effect can be discussed in terms of the apparent localization of the signals. When the tones are out of phase, and the noise in phase, the tone and noise appear in different places and the tone is louder. When both tone and noise are in phase, they appear in the same place and the tone is less loud.—W. R. Garner.

1635. Pothoven, W. J., & Schuringa, A. (Central Air Med. Board, Ypenburg, Holland.) Aviation noise deafness, hearing standards and recruitment. *J. Aviat. Med.*, 1948, 19, 380-388.—Many experienced pilots do not have the slightest difficulty in their flying duties even though tests of auditory acuity may indicate that they have considerable hearing losses. The authors show that the phenomenon of recruitment may account for this situation and they argue that hearing standards for fliers should take recruitment into account. 15 references.—A. Chapanis.

1636. Rudmose, H. W., Clark, K. C., Carlson, F. D., Eisenstein, J. C., & Walker, R. A. (Harvard U., Cambridge, Mass.) The effect of high altitude on the threshold of hearing. *J. acoust. Soc. Amer.*, 1948, 20, 766-770.—"The threshold of hearing has been measured in a decompression chamber at ambient pressures corresponding to altitudes of 35,000 feet and sea level. After the data have been corrected for the change of cushion seal and the change in response of the earphone unit with change in pressure, the results show that the shift in the average threshold of hearing for fifteen ears is within ± 2.5 db of sound pressure level when the density of the air in the outer and middle ears is decreased to about one-fourth that at sea level."—W. R. Garner.

1637. Saltzman, Maurice, & Ersner, Matthew S. Masking as an aid in audiology in children. *Laryngoscope, St Louis*, 1948, 58, 1127-1130.—A case history is presented to suggest the use of masking to facilitate audiology of young children.—A. C. Hoffman.

1638. Wever, Ernest Glen (Princeton, N. J.), & Lawrence, Merle. The functions of the round window. *Ann. Otol., etc., St Louis*, 1948, 57, 579-589.—Cochlear potentials (electrode usually placed on the round window membrane) of 14 cat ears were studied before, during, and after immobilization

of the round window. Application of a small probe sufficiently to indent the membrane was not found to affect auditory sensitivity. Exerting air pressure by means of a tube over the window or packing the niche with bone wax occasioned progressive (beginning around 500 cycles/sec.) reduction of response to high tones, seldom exceeding, however, more than about 10 db. With the middle ear removed and sound introduced to the oval window by means of a tube, the above immobilization procedures (again applied to the round window) had little or no effect on response to high tones but in some instances reduced response to low tones. Since check experiments seem to exclude the possibilities of sound-field disturbance (due to the presence of the block materials) and of the modification of a secondary path for sound transmission, it is concluded that the immobilization affects the mechanical impedance of the ear.—A. C. Hoffman.

[See also abstracts 1565, 1900.]

RESPONSE PROCESSES

1639. Atkinson, John W., & McClelland, David C. (Wesleyan U., Middletown, Conn.) The projective expression of needs. II. The effect of different intensities of the hunger drive on Thematic Apperception. *J. exp. Psychol.*, 1948, 38, 643-658.—After 1, 4, or 6 hours of food deprivation 81 Ss wrote out brief stories about 7 pictures. Two judges analysed the stories for 23 characteristics related to the hunger drive, agreeing in a large percentage of cases. With increase in hunger, "there was no overall increase in the percentage of Ss showing food imagery or food themes, but there was a decided increase in the percentage showing food deprivation themes, characters expressing a need for food, and activity successful in overcoming deprivation, but not always instrumental in getting food. On the other hand, as hunger increased, there was a decided decrease in the amount of goal activity (eating) and in friendly press, favorable to eating." A composite need food score differentiated reliably the 3 deprivation groups. "No outstanding difference in sensitivity to reflecting hunger was discovered for the various pictures used provided the picture was enough related to hunger to produce a sufficient number of food-related responses to show a differential. . . . It is suggested . . . that the amount of need deprivation and of instrumental activity present in stories is a better index of the strength of a need than is the amount of goal activity." (see 22: 4252).—R. B. Ammons.

1640. Craig, D. (Indiana U., Bloomington.) A comparison of various manipulative techniques in a tracking test. *Proc. Ind. Acad. Sci.*, 1948, 57, 188.—Abstract.

1641. Davis, R. C. (Indiana U., Bloomington.) Responses to 'meaningful' and 'meaningless' sounds. *J. exp. Psychol.*, 1948, 38, 744-756.—24 Ss lay quietly on cots and listened to 12 tones given at

about 2-min. intervals, and of 70, 90, or 100 db intensity. S was instructed to respond at the end of each of 6 tones by pressing a button under his right forefinger, and not to respond at all to the other 6 tones. Electrodes were placed over the extensor muscles in the forearm and on the upper arms, and integrated action potentials were recorded. "Telling the Ss to respond heightened the pre-stimulus tension in the arm to be used. Two stimulus effects, called the a- and b-responses, in the first and later parts of the two-second period were analyzed. The first of these is part of the 'startle pattern,' the second is evidently the 'set' reaction. . . . Both show a slight adaptation. Both vary with stimulus intensity whether the S is going to make a finger movement or not. When the S is going to execute that movement, these fore-period reactions are very much larger in the arm that is to respond, showing that instructions do modify the antecedent effects. Much, if not all, of this increase seems to take place because the preliminary tension level is higher."—R. B. Ammons.

1642. Ellison, Douglas G., & Hill, Harris. (Indiana U., Bloomington.) Action potentials during a tracking response. *Proc. Ind. Acad. Sci.*, 1948, 57, 187.—Abstract.

1643. Franklin, Joseph C. (Purdue U., Lafayette, Ind.), Schiele, Burtrum C., Brözek, Josef, & Keys, Ancel. (U. Minnesota, Minneapolis.) Observations on human behavior in experimental semistarvation. *Proc. Ind. Acad. Sci.*, 1948, 57, 187.—Abstract.

1644. Goldstein, Jacob, & Pastore, Nicholas. (1841 Broadway, New York.) Sexual behavior of the American male: a special review of the Kinsey Report. *J. Psychol.*, 1948, 26, 347-362.—This is a review of the statistical procedures used by Kinsey in "Sexual Behavior in the Human Male." That researcher's technique was a verbal interview of American white males concerning sex experience which terminated in orgasm; and his purpose was statistical rather than verification of any hypothesis. This review is critical toward these factors: (1) use of orgasm as an index of sexual activity, (2) possible errors due to selective factors, (3) verbal patterns may not correspond to actual behavior, (4) difficulties of interpretation due to unclear exposition of methodology and inexact presentation of data.—R. W. Husband.

1645. Grant, Vernon W. (Adelphi Coll., Garden City, N. Y.) A major problem of human sexuality. *J. soc. Psychol.*, 1948, 28, 79-101.—The author examines the hypothesis that sex behavior is subsumed by simple tumescent and detumescent processes and, drawing upon the writings of experts, he questions the adequacy of derivative concepts of sublimation in describing and understanding the dynamics of sex behavior. He criticizes the identification of amorous nongenital behavior as necessarily either a stage of tumescence or sublimation, citing evidence indicating that much sex behavior is amorous without genital strivings toward physical union. Clearer definition of the term sex is needed stripped of "the

prodigal over-extension of the meaning of the term by psychoanalysts." 55 references.—*J. C. Franklin.*

1646. Katzell, Raymond A. (*Syracuse U., Syracuse, N. Y.*) Relations between the activity of muscles during preparatory set and subsequent overt performance. *J. Psychol.*, 1948, 26, 407-436.—This experiment concerned itself with the relationship between preparatory muscular set and subsequent overt muscular response. Nine different muscles or muscle groups were measured simultaneously for the 30 second pressure period. "When the tasks were within the performance capacity of the S's, the patterns of preparatory tensions were approximately diminished, covert duplicates of the patterns occurring during subsequent overt performance. Changes in preparatory tension in a muscle from one task to the next were generally paralleled by changes in the same direction during overt performance of the tasks. The degree of covariation was, however, less when the instructed tasks were beyond the performance capacities of the S's." The point of view is advanced that preparatory muscular set is an expression of existing motivation (intention.)—*R. W. Husband.*

1647. Luria, Z. H. (*Indiana U., Bloomington.*) Experiments on a suggestion-induced movement response. *Proc. Ind. Acad. Sci.*, 1948, 57, 188-189.—Abstract.

1648. Mackworth, N. H. (*Med. Res. Council Applied Psychol. Res. Unit, Cambridge, Eng.*) Definition of the upper limit of environmental warmth by psychological tests of human performance. *Roy. Soc., Emp. Sci. Conf. Rep.*, 1948, 1, 423-441.—After being acclimatized by 14 to 30 daily exposures in a hot room naval personnel were given prolonged tests at effective temperatures (dry/wet bulb, air movement at 100 ft./min.) of 79°, 83°, 87.5°, 92° and 97°F. Five situations were used each with different subjects. (1) 10 Ss performed a pursuitmeter problem (a) with a finger control, (b) with a weighted (50 lb) control for 10 three hour periods. Each period consisted of 30 min. of (a) and 30 min. of (b) per hour given in a sequence of 3 min. work and 3 min. rest. At 87°F there was a significant deterioration of performance from the 79°F level. (2) 11 Ss performed a complicated code test (involving the placing on pegs of squares which varied in size, serial order and top side) for 10 three hour periods. At 87°F performance deteriorated significantly from the 83°F level. (3) 69 Ss were given a visual attention test of 2 hours duration. (The visual signals were "very faint and difficult to see and appeared at long and irregular intervals.") At 79°F both the Ss with experience on naval lookout duty and those without were equally efficient, "at the higher room temperatures the experienced men stood the heat better." (4) The effect of restlessness during sleep was studied with 6 Ss over a period of 2 months. At 87°F there was a significant increase in restlessness over the 79°F level. Overnight weight loss in the latter situation was 1 lb. 8 oz., in the former 3 lbs. (5) A previously reported (see 21: 583) study is

summarized. It revealed that high temperatures produced less deterioration in the more efficient operations. Also it, as did (1) and (2) above, gave a curve of deterioration of performance under increased temperatures expressed by $\log (\text{gamma}) = C_0 + C_1 X$ where C_0 and C_1 are constants, X room temperature and gamma the incident of errors.—*R. B. Bromiley.*

1649. Münnich, K. Die Reaktionsleistung in Abhängigkeit von der Körperlage. (Reaction times in relation to the body position.) *Industr. Psychotech.*, 1940, 17, 49-83.—The author has constructed a device which permits of turning the subject's armchair in the vertical or horizontal plane and of making the subject assume different positions: (1) normal (the subject seated normally with back of chair inclined at 120° in relation to the seat); (2) stomach downward; (3) head downward; (4) back downward; (5) on right side; (6) on left side. In each of these positions the subject had to undergo diverse tests of reaction-times, each test being modelled after an aspect of the pilot's work as far as concerns the stimulus and the form of reaction. Reaction-times are graphically recorded by means of the Ach chronoscope. The results have shown on the whole a lengthening of reaction-times, an increase in mean-variation and in number of errors, at the beginning of the series after change of position,—modifications which tend to diminish toward the end of the series. However, the matter is not of an absolute generality as certain subjects have improved their performance in the most uncomfortable positions,—which the author explains as being the probable effect of an augmentation of voluntary effort.—(Courtesy of *Année psychol.*)

1650. Promptow, A. N. Vocal imitation in the Passeriformes as one of the specific features of their higher nervous activity. *C. R. Acad. Sci. U. R. S. S.*, 1944, 45, 261-263.—The song of the bird is not exclusively due to hereditary factors. A bird isolated from the moment of hatching develops his own song which has nothing to do with that of his species. He learns easily the song of the other species, if the latter does not go beyond his vocal possibilities. But, among diverse songs presented for his choice, he learns by preference that of his own species, which indicates a certain intervention of hereditary characters.—(Courtesy of *Année psychol.*)

1651. Räber, Hans. (*Tierpark Dählhölzli, Bern, Switzerland.*) Analyse des Balzverhaltens eines domestizierten Truthahns (*Meleagris*). (An analysis of mating behavior in a domesticated turkey (*Meleagris*).) *Behavior*, 1948, 1, 237-266.—"A description is given of a domesticated turkey-cock, which when under the influence of the mating drive reacted to the appearance of any man by instinctive courtship and mating activities such as are generally directed towards the same species. At the appearance of any woman, however, he reacted by fighting—or fleeing—instinctive actions normally stimulated by rivals of the same sex." Experimental observations showed that courtship display could be evoked

by man or dummy without hanging or moving objects attached. Copulatory activity could be induced by any object the size of a hen on the ground. When any object had loosely dangling objects attached, the bird would either attack or flee. The affective, tactic and instinctive components of this behavior are discussed. 17 references. English summary.—*L. I. O'Kelly*.

1652. Rudolfini, —, & Menzel, Rudolf. *Vorläufige Mitteilung über den Beziehungstype Hund-Katze*. (A preliminary communication on the types of relationship between dogs and cats.) *Behaviour*, 1948, 1, 226-236.—Observations were made on wild, half-wild and tame dogs and cats in an area where cats were more restricted to the ground by an absence of an abundance of trees and buildings than is usually the case. A comparison of the behavior of individual members of these species in their interactions seem to be dependent on two conditions: "rivalry in overlapping territories" and "the natural antagonism between a predator and prey which is capable of defending itself." The relations between dog and cat ranged from "constant aggression to a mutual tolerance in which aggressive actions are few." The conscious interference of man makes possible many changes in this "natural" relationship. 17 references. English summary.—*L. I. O'Kelly*.

1653. Searle, Lloyd V., & Taylor, Franklin V. (*Naval Research Laboratory, Washington, D. C.*) *Studies of tracking behavior. I. Rate and time characteristics of simple corrective movements*. *J. exp. Psychol.*, 1948, 38, 615-631.—"Using a simple test apparatus, Ss were required to make arm-hand corrective movements of five to 80 millimeters in extent." The results show that: 1. The maximum rate and average rate of a movement increase systematically with increasing extent of movement. The relation is approximately linear in most cases. . . . Reaction times are relatively independent of the distance to be moved. 2. In the situations studied, rates are highest for movements from left to right and are successively lower for forward, left, and backward movements. 3. . . . For movements of comparable distance in each case, rates at the pointer are slightly lower, and rates at the hand are higher at the 3:1 than at the 1:1 ratio [of control sensitivity]. In general, the operator tends to compensate for the change in sensitivity in such a way as to produce nearly the same perceived result with respect to both rate and accuracy. 4. The addition of an appreciable amount of inertia to the control knob causes the rate to be decreased for given distances of movement and the precision to be slightly improved. With additional friction . . . the responses are speeded up and precision is definitely lower than when minimum friction is present. . . .—*D. W. Taylor*.

1654. Southern, H. N. (*Oxford U., Eng.*) *Sexual and aggressive behaviour in the wild rabbit*. *Behaviour*, 1948, 1, 173-194.—Observations of marked wild rabbits (*Oryctolagus cuniculus*) were carried on

for a period of 2 years in a natural setting. The sexual behavior observed consisted of "(a) chasing, (b) tail 'flagging,' in which the buck paraded before the doe with the tail elevated over the back, (c) enurination, in which the buck projected a jet of urine at the doe, (d) attempts at copulation, and (e) 'amatory' behavior, such as grooming and licking." Aggressive behavior between young and old does and a formalized leaping between bucks were noted. Sexual rivalry between does was manifested as defence of "territory" and a few of the strongest bucks dominated the available does.—*L. I. O'Kelly*.

1655. Taylor, Franklin V., & Birmingham, Henry P. (*Naval Research Laboratory, Washington, D. C.*) *Studies of tracking behavior. II. The acceleration pattern of quick manual corrective responses*. *J. exp. Psychol.*, 1948, 38, 783-795.—"Visual errors in the two horizontal directions and of three different sizes were produced instantaneously and presented in random order to 10 Ss. The errors were corrected through the movement of a joy stick. The joy stick responses were analyzed electrically into time plots of position, rate, acceleration and the third derivative of acceleration (Δ acceleration)." The following generalizations seem justified: "a. As the visual error increases, (1) the S applies more force in the direction of motion and also more braking force; (2) he applies and removes these forces at a greater rate; and (3) he applies these forces over a slightly greater period of time. b. Throughout the course of any one motion, force varies continuously. . . . The time relations of these corrective motions are such that it appears that once started, the motions run off without visual or kinesthetic guidance. . . . The latter finding suggests that control in target tracking is an intermittent rather than a continuous process."—*R. B. Ammons*.

1656. Van Liere, Donald W. (*Indiana U., Bloomington*) *Habituation in the "startle response" as measured by the action potential technique*. *Proc. Ind. Acad. Sci.*, 1948, 57, 188.—Abstract.

1657. Vujic, Vladimir, & Kurtes, Kosta. *Influence of restraint on automatic movements*. *Lancet*, 1948, 255, 527-528.—"Restraint of automatic arm-swinging on one side in normal people reinforces arm-swinging on the opposite side. Restraint of arm-swinging on the sound side in unilateral extrapyramidal lesions—e.g. incipient parkinsonism, chorea minor, and encephalitic pseudoneurasthenia—brings back the arm-swinging on the affected side if there is not much hypertonus. In unilateral pyramidal lesions such restraint has no such effect, regardless of state of muscular tone."—*A. C. Hoffman*.

COMPLEX PROCESSES AND ORGANIZATIONS

1658. Cargnello, D. *Amore, amicizia, aggressività ed ipseità nella antropologia esistenzialista di Ludwig Binswanger*. (Love, amity, aggressivity

and ipseity in the existentialistic anthropology of Ludwig Binswanger.) *Riv. Psicol.*, 1947, 43, 111-142.—This first of a series of existential analyses (love, amity, aggressivity and ipseity) according to Binswanger deals with the mode of being-in-love-with-one-another. This *modus amoris* is not to be confused with sexual love, with romantic love, with religio-mystical love, with Platonic love, with intentionality of the Ego toward a love object in the sense of Husserl, or with *Einfühlung*. For Binswanger "being in love with one another" refers exclusively to the mode of being in love in a *we-ness* sense, in the sense of two hearts that beat as one and two minds with but a single thought. This *modus amoris* may spring into existence in two persons (more commonly but not necessarily, a man and a woman) if they meet in one of so many work, study, diversion situations. The "we-ness" of this mode of love bridges space and time. This irrational *modus amoris* which is at bottom a psychological rapport has a language all its own and is most eloquent in silence.—F. C. Sumner.

1659. Chapman, Robert L. (U. Chicago, Ill.) **The MacQuarrie Test for Mechanical Ability.** *Psychometrika*, 1948, 13, 175-179.—Data on the test previously supplied were subjected to the principle axes factoring method. Greatest variance was extracted with three factors. A more satisfactory factor pattern, giving clearer interpretation of factors and better conformity to the structure concept, was obtained by rotation to an oblique structure than by use of the orthogonal factor matrix. The factors: A, spatial; B, motor; C, manual agility (somewhat nebulous). 4 references.—M. O. Wilson.

1660. Dougan, Catherine, & Welch, Livingston. (Hunter Coll., New York.) **A study of elation, making use of the Rorschach test and an association test.** *J. Psychol.*, 1948, 26, 363-366.—Sixty students, 15 of whom had artistic ability, were given Rorschach slides and also nonsense syllables for associative purposes, to see if those who went in for original creation might show less restraint in associations, say something like elated patients. The artistic group was well ahead of the other 45 in both tests in numbers of responses.—R. W. Husband.

1661. Sartre, Jean-Paul. **The emotions; outline of a theory.** New York: Philosophical Library, 1948. 97 p. \$2.75.—Sartre states in the introduction that he does not intend to present a phenomenological study of emotion. Such a study would deal "with affectivity as an existential mode of human reality." His aim is to apply to the psychological study of emotion phenomenological methods. Not facts are to be gathered but the significance of phenomena will be analyzed. After discussing the classical theories and the psychoanalytical theory he sketches a phenomenological theory of emotions. This is a finalistic theory; emotion is a way of coping with the world. When realistic action becomes too difficult, a reorganization of the psychological environment ensues and the world will be seen and acted upon in a magic way. Fainting in terror is a

magical action with the purpose of annihilating the danger. Joy tends magically "to realize the possession of the desired object as instantaneous totality." —F. Heider.

[See also abstracts 1546, 1908.]

LEARNING & MEMORY

1662. Bruce, R. W. (Wabash Coll., Crawfordsville, Ind.) **Relation of benefits of distribution of effort to learning difficulty of a task.** *Proc. Ind. Acad. Sci.*, 1948, 57, 187.—Abstract.

1663. Bugelski, B. R. (U. Buffalo, N. Y.) **An attempt to reconcile unlearning and reproductive inhibition explanations of proactive inhibition.** *J. exp. Psychol.*, 1948, 38, 670-682.—"One hundred Ss learned 10 lists of paired-associate nonsense syllables in rapid succession. The lists were designed to provide a high degree of interference. . . . The odd-numbered lists were learned relatively better than the even-numbered lists. . . . Ss continued to respond with syllables learned in the early lists all through the later lists. Responses from list 1 were being made in list 10. There was a progressive decline in the appearance of such early learned responses, although intra-list interferences also tended to decline so that the majority of interferences were relatively remote. . . . The results of this experiment, on the whole, support McGeoch's interpretation of unlearning as reproductive inhibition at the time of interpolated learning."—R. B. Ammons.

1664. Campbell, S. L. (Indiana U., Bloomington.) **An experimental study of avoidance behavior.** *Proc. Ind. Acad. Sci.*, 1948, 57, 188.—Abstract.

1665. Förster, Heinz. **Das Gedächtnis; eine quantenphysikalische Untersuchung.** (Memory; a quantitative physical investigation.) Vienna: Franz Deuticke, 1948. xv, 40 p.—This treatise deals with Ebbinghaus' classical experiments on memory from a mathematico-theoretical point of view. It postulates elements of consciousness (called MEM), which constitute the statistical units of the study. These "carriers" are likened to the theoretical carriers of hereditary characteristics (GEN's) described by Delbrück, Schrödinger, etc. as the quantum state of a large molecule (aperiodic crystal), and shown to follow similar laws. The process of memory causes "impregnation" of a MEM, which means in the language of quantum mechanics, that it is lifted to a higher state of energy. Unless the energy is reinforced, the MEM eventually reverts spontaneously to its previous state of energy (forgetting). From these theoretical formulations, a number of deductions are made, which are documented by statistical formulas. Ebbinghaus' empirical curves of forgetting are demonstrated to show close resemblance to a theoretical function developed by the author.—H. H. Strupp.

1666. Frick, Frederick Cowing. (Harvard U., Cambridge 38, Mass.) **An analysis of an operant discrimination.** *J. Psychol.*, 1948, 26, 93-123.—

This investigation has been concerned with the analysis of an operant discrimination. In particular, experiments have been set up to determine the comparative utility of a number of possible measures of operant discrimination, and to determine the stimulus function for such a discrimination. White rats responded by pressing levers, with a discriminative stimulus varying from .02 to 20 foot candles. The overall rate of responding was the most satisfactory measure of response strength. Total responses gave too arbitrary a figure, and response times were too variable. "The measure of discrimination finally utilized was the deviation in rate of Ss responding from predicted rate of responding under the periodic reinforcement schedule of the experiment. . . . A 'generalization' curve indicating the effect of changes in the discriminative stimulus upon rate of responding is derived from the data obtained on the function of the stimulus." 24 references.—R. W. Husband.

1667. Grant, David A., & Schneider, Dorothy E. (U. Wisconsin, Madison.) Intensity of the conditioned stimulus and strength of conditioning: I. The conditioned eyelid response to light. *J. exp. Psychol.*, 1948, 38, 690-696.—"Strength of conditioning the eyelid response to light was investigated as a function of the intensity of the CS. . . . The four stimulus brightnesses were 7, 60, 320, and 1050 millilamberts. Fifty reinforcement trials, consisting of paired presentations of light and corneal air-puff, were given, 25 trials on each of two days. Fifteen extinction trials were given after the reinforcement trials of day 2. Re-extinction Series were then given with the same CS that had been used during reinforcement. All trials were run with the Ss light adapted. . . . Although there were trends of increased frequency and magnitude of CRs with the higher intensities of the CS, neither strength of conditioning nor response strength was significantly affected by variation in CS intensity. . . . Generalization both of reinforcement and extinction seemed to be present, but these tendencies were not statistically significant." An interpretation of conditioning in terms of signalling and triggering mechanisms is favored. 22 references.—R. B. Ammons.

1668. Grice, G. Robert. (Brown U., Providence, R. I.) The acquisition of a visual discrimination habit following response to a single stimulus. *J. exp. Psychol.*, 1948, 38, 633-642.—"In a specially designed visual discrimination apparatus, 10 white rats each made 200 rewarded responses to a single white circle eight cm. in diameter. Another group of 10 rats made 200 rewarded responses to a five centimeter white circle. Both groups were then trained in a size discrimination problem in which the 8-cm. circle was positive and the 5-cm. circle was negative. . . . The group with the preliminary training to the 8-cm. circle learned the discrimination problem at a significantly faster rate than the group with the preliminary training to the 5-cm. circle. . . . The data are interpreted as being in accord with the theory of generalization, [and]

. . . as confirming evidence for the continuity theory as opposed to the non-continuity interpretation of discrimination learning." 20 references.—R. B. Ammons.

1669. Haggard, Ernest A. (U. Chicago, Ill.), & Babin, Rachel. On the problem of 'reinforcement' in conditioning the autokinetic phenomenon. *J. exp. Psychol.*, 1948, 38, 511-525.—"There were three experimental variables: (a) Motor reinforcement: Movement With (drawing arrows in the same direction as the apparent movement of the light), Movement Against (drawing arrows in the opposite direction), and No Movement (sitting passively); (b) Reward reinforcement: Reward (the presence of both social and monetary reward) and No Reward . . . ; and (c) Eye Dominance. . . . The measures used included an Index of Conditioning, the frequency, direction, and magnitude of all horizontal movements of the light, and the degree of the Ss' confidence in their perceptions of the apparent movement of the light. The results permit the following general conclusions: 1. Both the fact and the pattern of motor reinforcement played an important role in conditioning the autokinetic phenomenon in this experiment. The order of effectiveness of the conditions in this variable was: Movement With, Movement Against, and No Movement. 2. The reward reinforcement and eye dominance variables were less effective than motor reinforcement, with Reward and Left Eyedness being superior to the opposing conditions. 3. The difference between the relative effectiveness of the three variables in modifying the autokinetic phenomenon seems to be one of degree." 34 references.—D. W. Taylor.

1670. Hullo, Antoine. (*Laboratoire d'Evolution des Etres Organisés, Paris.*) Role des tendances motrices et des données sensorielles dans l'apprentissage du labyrinthe par les blattes (*Blattella germanica*). (The role of motor tendencies and sensory data in maze-learning by the cockroach, *Blattella germanica*.) *Behaviour*, 1948, 1, 297-310.—Using a five-unit T-maze and escape from light as motivation, the writer analyzed the cues utilized by the cockroach in learning the maze pattern. A prominent centrifugal swing was noted but this could be inhibited by training. Immobilization of the antennae interfered seriously with learning as did changes in the maze pattern or covering the maze with cellophane. This led to the conclusion that "learning based only upon kinaesthetic data is therefore impossible." Changes in the position of the light source between series were found to interfere with learning. The writer concludes: "The most important data used by *Blattella* in learning the maze are those supplied by the antennae." Kinaesthetic data are of lesser importance. 13 references.—L. I. O'Kelly.

1671. Liberman, Alvin M. (Wesleyan U., Middletown, Conn.) The effect of differential extinction on spontaneous recovery. *J. exp. Psychol.*, 1948, 38, 722-733.—"Two groups of rats [N's of 21] were trained by the same procedure to a criterion of per-

formance on Runways A and B. One group (double-extinction) was extinguished to a performance criterion on Runway A by being given non-reinforced trials on A, irregularly interspersed with non-reinforced trials on B. The other group (differential-extinction) was extinguished to the same criterion on A according to a procedure which involved non-reinforced trials on A, irregularly interspersed with reinforced trials on B. The latter procedure produced in the differential-extinction group the relatively greater differentiation of the runways (as indicated by performance measures). Measures of spontaneous recovery taken one hour after the end of extinction reveal that the differential-extinction group had the lesser amount of spontaneous recovery." It is proposed that ". . . spontaneous recovery can be accounted for, in part at least, on the assumption that the relatively broad transfer of extinction tendencies sets up a large number of activities which can and do interfere with the retention of the extinction."—R. B. Ammons.

1672. Postman, Leo (*Harvard U., Cambridge, Mass.*), Egan, James P., & Davis, Jean. Rate of recall as a measure of learning: I. The effects of retroactive inhibition. *J. exp. Psychol.*, 1948, 38, 535-546.—"Two experimental groups and a control group were used in the usual design for experiments on retroactive inhibition. The experimental groups learned an interpolated task five min. after the original learning while the control group rested. The original learning series for all groups consisted of 18 nonsense syllables and four three-digit numbers. For one group, the interpolated material consisted of 18 syllables and four three-digit numbers; for the other group, 18 three-digit numbers and four syllables. The lists were presented nine times in random order. The Ss were tested by the method of free recall at the end of the original learning and retested five min. after the interpolated activity. The speed with which responses were given was recorded on both tests. When *correct* responses are considered, . . . rate of recall differentiates significantly among the experimental conditions. . . . Interpolation of items similar to the original learning material causes a greater depression in the rate than interpolation of dissimilar material. Measured by variations in rate of recall, 'isolated' materials (digits) are more susceptible to interference effects than 'crowded' materials (syllables)."—D. W. Taylor.

1673. Postman, Leo, & Jenkins, William O. (*Harvard U., Cambridge, Mass.*) An experimental analysis of set in rote learning: the interaction of learning instruction and retention performance. *J. exp. Psychol.*, 1948, 38, 683-689.—"The learning materials were 25 two-syllable adjectives. The list was presented to all Ss five times at a constant rate. Set was varied by instructing the subjects for different types of retention tests: anticipation, free recall, and recognition. Retention was tested by these three methods. All possible combinations of tests and instructions were used so that every instruction was followed by every test. To the extent that

learning instructions single out and emphasize those aspects of the learning task which are to be used in the retention test, Ss' performance is favored. To the extent that learning instruction and retention problem fail to harmonize in their selective emphasis on certain aspects of the learning task, performance is impaired. These findings emphasize the need to isolate the specific dimensions along which set may vary. Clearly one of these dimensions is S's readiness for a particular type of test. Throughout the period of practice, the expectation of a specific testing procedure influences learning behavior."—R. B. Ammons.

1674. Ritchie, Benbow F. (*Swarthmore Coll., Pa.*) Studies in spatial learning. VI. Place orientation and direction orientation. *J. exp. Psychol.*, 1948, 38, 659-669.—"Two kinds of auxiliary dispositions are . . . distinguished, (1) place dispositions and (2) direction dispositions, and the evidence for the existence of such dispositions is reviewed. . . . To determine whether such auxiliary dispositions generalize to new starting places or paths, a group of 50 rats was trained on a simple T-maze. . . . After this training was completed, each of the rats [was] started from a place which was on the opposite side of the choice point of the original maze, and on the same axis as the original starting path. . . . Fifty-seven percent of the rats exhibited an auxiliary direction disposition. That is, they chose the last path on the side facing the former food place. There was no evidence that these rats also acquired an auxiliary place disposition. Only 7.2 percent of the animals chose the path that pointed directly towards the former food place." (see 22: 194).—R. B. Ammons.

1675. Simon, Charles W. (*Antioch Coll., Yellow Springs, O.*) Proactive inhibition as an effect of handedness in mirror drawing. *J. exp. Psychol.*, 1948, 38, 697-707.—"40 right-handed and 20 left-handed Ss were given 4 one-min. trials at mirror drawing with each hand, hands alternated on successive trials. "In general, the non-dominant hand of both right and left-handed Ss was superior . . . to the dominant hand. . . . There was no significant difference between right and left-handed Ss in the relative frequency of the appearance of this phenomenon; however, left-handed Ss showed a consistent superiority over right-handed Ss in ability to do mirror drawing. . . . Learning occurred both between hands and between trials. The hand that performed second received some positive transfer from the hand that performed first. This positive transfer between hands sometimes counteracted the negative transfer effect, but did not completely eliminate it. . . . Moving in a counter-clockwise direction slightly increased the performance superiority of the non-dominant hand over the dominant hand."—R. B. Ammons.

1676. Van Dusen, Frances, & Schlosberg, Harold. (*Brown U., Providence, R. I.*) Further study of the retention of verbal and motor skills. *J. exp. Psychol.*, 1948, 38, 526-534.—"1. Fifty-one Ss

learned to locate and actuate 10 pairs of switches, so connected that a buzzer sounded when each correct pair was turned on. At the same time they learned 10 pairs of nonsense syllables, attached as labels to the switches. 2. After three correct trials, they were given a pre-retention test on the two types of materials separately, and divided into three groups. The groups came back for post-retention tests after 1, 7 and 28 days, respectively. 3. There was no significant difference in retention between the two types of materials after any of the retention intervals. 4. The actuation of the paired switches is believed to be a perceptual-motor activity, fairly free from verbal elements. Therefore, the results disprove the hypothesis that motor materials are retained better than verbal ones if both are organized in the same manner. 5. The marked resistance of certain skills, as the pursuit rotor, [to forgetting] is apparently due to their integrated nature."—D. W. Taylor.

1677. Voeks, Virginia W. (*U. Washington, Seattle.*) Postremity, recency, and frequency as bases for prediction in the maze situation. *J. exp. Psychol.*, 1948, 38, 495-510.—One group of 25 Ss learned a raised relief finger maze. A punch-board maze was learned by a group of 16 Ss who pushed the stylus into the holes; a second group of 16 Ss learned the same maze, but had to screw the stylus in. "It was found that prediction of responses based upon postremity correspond remarkably closely to future observed responses—not only for all groups but for all individuals, the predictions being correct for no individual less than 73 percent of the time and for most individuals more than 85 percent of the time. . . . High accuracy of prediction based upon postremity also was found even for those times on which it predicted the response opposed to the one most frequently made in the past . . . when frequency and postremity were at variance, predictions based on frequency were less accurate than would be ones based on chance . . ." 23 references.—D. W. Taylor.

[See also abstracts 1696, 1917.]

THINKING & IMAGINATION

1678. Mintz, Alexander. (*City College of New York.*) Schizophrenic speech and sleepy speech. *J. abnorm. soc. Psychol.*, 1948, 43, 548-549.—Two bizarre utterances of sleepy normal persons are interpreted as loosely organized but meaningful remarks. Sleepy thinking is similar to schizophrenic thinking.—C. M. Harsh.

1679. Samarin, Iu. A. Ob utochnenii psichologicheskoi terminologii. (Concerning the refinement of psychological terminology.) *Sovetsk. pedag.*, 1948, No. 2, 72-78.—Several soviet textbook writers have used the terms "reproduction" and "imagination" in a confusing manner. Kornilov, Teplov, and Schwartz regard reproduction as "the reconstruction of an object with maximum exactitude." On the other hand, these same authors regard imagination as the process of creating new ideas which are not derived

directly from the previous experience. The present writer points out that reproduction is in itself a recreative process, and is involved in creative imagination. It is therefore improper to oppose the two concepts. "It seems to us that we should renounce the term 'creative imagination' because it implies a special type of imagination, whereas even creative imagination involves reproduction."—R. A. Bauer.

1680. Sartre, Jean Paul. The psychology of imagination. New York: Philosophical Library, 1948. 285 p. \$3.75.—The French novelist and existentialist, turns psychologist to present his "study in phenomenological psychology [aimed at] describing the great unrealizing function of the mind by means of close consideration of the operations of imagination and of the nature of the imagery. . . . It is reflection which permits the judgment 'I have an image.' The act of reflection thus has a content of immediate certainty which we shall call the *essence* of the image. This essence is the same for everyone; and the first task of psychology is to explain this essence, to describe it, to fix it. . . . The data of reflection are certain. . . . All new studies of the image should, therefore, begin with a basic distinction; that it is one thing to describe the image and quite another to draw *conclusions* regarding its nature." He ignores all known theories as unproductive. "We shall . . . formulate into concepts the knowledge that is immediate and certain. We want to know nothing about the image but what reflection can teach us." He wishes to attempt only a phenomenology of the image by producing images, reflecting upon them, describing them, and to attempt to determine and classify their distinctive characteristics. He draws some individual conclusions such as "The dream is primarily a story, lived in as spell-binding fiction." His results are fixed by concepts.—L. R. Steiner.

1681. Wenzel, Bernice M., & Flurry, Christine. (*Barnard Coll., Columbia U., New York.*) The sequential order of concept attainment. *J. exp. Psychol.*, 1948, 38, 547-557.—"The anticipation method of learning was used. A drawing was exposed, by means of an exposure device, for three sec. It was followed by its nonsense-syllable name, also exposed for three sec. The Ss were instructed that they were to apply each syllable to a certain type of picture. Thus, they were set to form concepts rather than merely to learn names. There were two sets of six concepts each. A set consisted of 18 series of six drawings each, representing the individual concepts. No drawing was shown twice." Within each set two syllables represented concepts of concrete objects, two of spatial form, and two of number. Each of the two sets was learned by a group of 20 Ss. The results obtained confirmed the earlier findings of Heidbreder (see 19: 1434; 21: 1426). "All of the concepts of concrete objects were formed earlier than those of spatial form, while the latter were formed earlier than those of numbers. All of the inter-category differences were significant

at the .01 level and only two of the 18 intracategory differences reached significance at the .05 level."—*D. W. Taylor.*

INTELLIGENCE

1682. Hunt, William A., French, Elizabeth G., Klebanoff, Seymour G., Mensh, Ivan N., & Williams, Meyer. (*Northwestern U., Evanston, Ill.*) Further standardization of the CVS individual intelligence scale. *J. consult. Psychol.*, 1948, 12, 355-359.—The CVS battery (comprehension, similarities, vocabulary) has been shown to be a promising abbreviated individual intelligence scale. The present article reports cross-validation data, a further check on the battery's diagnostic performance and more extensive norms based on 1039 Navy recruits.—*S. G. Dulsky.*

[See also abstracts 1589, 1698, 1702, 1774.]

PERSONALITY

1683. Franklin, G. H., Feldman, S., & Odber, H. S. (*Dartmouth Coll., Hanover, N. H.*) Relationship of total bodily movements to some emotional components of personality. *J. Psychol.*, 1948, 26, 499-506.—The purpose was to investigate the expressive significance of total bodily movement in dance-form. A scale was devised to describe movements of 9 body parts (head, eyes, legs, etc.). 18 high school girls, trained in dance, were given 4 auditory patterns. 10 relationships out of 132 between certain responses and certain scores on the Guilford and Bender inventories had significance above the 5% level. 30 references.—*R. W. Husband.*

1684. Harmon, Francis Leland. (*St. Louis U., Mo.*) *Understanding personality.* Milwaukee: Bruce Pub. Co., 1948. x, 338 p. \$3.50.—The intent of this book is to survey the field of the psychology of personality. To achieve this objective the author includes chapters on (1) the scientific study of personality; (2) pseudo methods of studying personality; (3) measurement of personality through "objective" devices, the projective techniques, and expressive movements; (4) somatic factors in personality; (5) role of genetics, maturation, and learning in personality development; (6) influence of the external environment, including social culture, on personality; and (7) pathological personalities (three chapters). Part IV, devoted to "Applied Personality Study," includes chapters on (1) "The Psychology of Childhood and Adolescence;" (2) "Clinical Psychology, Psychotherapy, and Mental Hygiene;" and (3) "Industrial Psychology and Vocational Guidance."—*W. Coleman.*

[See also abstract 1548.]

AESTHETICS

1685. Basler, Roy P. *Sex, symbolism, and psychology in literature.* New Brunswick, N. J.: Rutgers University Press, 1948. 226 p. \$3.50.—

The six essays in this volume attempt to provide a sex interpretation of the following poetic works: Blake's *Tiger*, Coleridge's *Christobel*, Tennyson's *Maud*, Poe's *Ligeria* and six other small pieces, and Eliot's *Prufrock*. All but the first have appeared originally in various literary magazines. The author, an English teacher, asserts that he relies heavily on Freud when he explains *Christobel* as a study in Lesbianism, *Maud* as a case of psychic frustration, etc.—*J. R. Kantor.*

1686. Graf, Max. How the master composers composed. *Etude*, 1948, 66(10), 584; 638.—According to Graf a great part of musical formation takes place in the "subconscious mind." These products appear in consciousness in periods of productive mood which may occur at set times of the year or whimsically.—*P. R. Farnsworth.*

1687. Hungerland, Helmut. Consistency as a criterion in art criticism. *J. Aesthet.*, 1948, 7(2), 93-112.—In a number of experiments composite pictures were produced by superimposing parts of a painting of one artistic style upon a painting of a quite different style. From the reactions of subjects to these and to paintings such as Picasso's *Girl before a Mirror* it is deduced that "consistency" is relative to the expectations and patterns of perceptions aroused. These latter may be changed through persuasion and education.—*P. R. Farnsworth.*

1688. Müller-Freienfels, Richard. (*U. Berlin, Germany.*) On visual representation: the meaning of pictures and symbols. *J. Aesthet.*, 1948 7(2), 112-121.—The thesis is upheld that "a work of art which represents a visible object is more valuable, the more it makes visible what the average eye does not see; and that *departure from the objects* is by far more interesting than all *resemblance* to it. *To understand a work of art means that in seeing it one emphasizes those non-visible aspects which the artist has made visible, and that one understands why he has departed from the so-called resemblance; i.e., what surplus values he has revealed in it.*"—*P. R. Farnsworth.*

1689. Sterren, H. A. van der. *De lotgevallen van Koning Oedipus volgens de treurspelen van Sophocles.* (The adventures of King Oedipus according to the tragedies of Sophocles.) Amsterdam: Scheltema & Holkema, 1948. 139 p.—A psychological study with a preface by Anna Freud. After a reproduction of Sophocles' "King Oedipus," "Oedipus in Kolo-nos," and "Antigone," these works are psychologically contemplated, which gives insight into the way Sophocles worked up the Oedipus-feelings and how he expressed and concealed unconscious feelings and images. Discussed are, among others: dreams, other forms of compensation, anguish, self-punishment, self-reproach, mistakes, resistance, connecting an important working with an unimportant detail, memories, and the ambiguous character of punishment. The doubt about the authenticity of certain parts of the text and about their significance, would

be connected with a deeper meaning expressed in those parts. 61 references.—*M. Dresden.*

1690. **Sward, Keith.** *Boy and girl meet neurosis.* *Screen Writer*, 1948, 4(3), 8-10; 24-26.—A number of recent motion pictures having a psychological or psychiatric theme, are reviewed. These are criticised from a psychological point of view because they do not give an adequate picture of neurotic or psychotic behavior, they do not portray behavior dynamics as it is currently understood, and they do not present an adequate picture of therapeutic methods. The author believes that the inadequacies of these films, from a psychological point of view, is due to Hollywood's efforts to capitalize on a popular subject, and a lack of knowledge on the part of scenario writers.—*C. M. Loultit.*

DEVELOPMENTAL PSYCHOLOGY

CHILDHOOD & ADOLESCENCE

1691. **Adcock, Cyril.** (*Victoria U. Coll., N. Z.*) *A re-analysis of Slater's spatial judgment research.* *Occup. Psychol.*, Lond., 1948, 22, 213-216.—Re-working Slater's data, using the factor methods of Thurstone, Holzinger, and Thomson, in addition to the cluster method of Slater, the author concludes that a *k* factor is present in spatial judgment of children. The seeming absence of *k* depends on the assumption that *g* must always appear in addition to the group factors.—*G. S. Speer.*

1692. **Allen, Winifred Y., & Campbell, Doris.** (*New York Kindergarten Ass'n., New York.*) *The creative nursery center; a unified service to children and parents.* New York: Family Service Association of America, 1948. 171 p. \$2.75.—Nursery center is the term used by the authors to cover nursery schools, day nurseries and day care centers, and the concept of a "creative" nursery center is stressed in opposition to the usual type of custodial care afforded children of nursery school age. The child and his family are viewed as a unit and maximum cooperation between parents and nursery school staff is recommended. Child development is discussed from a dynamic point of view and development through group experience is stressed. Practical problems of entering and leaving the center are taken up, as well as financial and legal aspects of setting up a nursery center.—*E. W. Gruen.*

1693. **Best, Pauline.** (*Simmons Coll., Boston, Mass.*) *An experience in interpreting death to children.* *J. Pastoral Care*, 1948, 2, 29-34.—Five year old Billy died after a 12-hour illness, and the author had to break the news to the other children in the kindergarten of the church school. She did so by holding a discussion with the children on how they did not know their parents before they were born, or their teachers before they started to school. When she asked if people know what will happen to them when they die one boy said, "We don't know, but God loves you whether you are dead or alive." When she told them that Billy had died the night before, they talked about him naturally and made a

list of what they said about him to send to his mother. When asked, "Do you know where Billy is today or what he is doing?", they did not know but, "we do know that God is loving him" and "we don't have to worry about him, do we?" They wrote a prayer to say about Billy, and when the parents received the letter from his school mates they were comforted.—*P. E. Johnson.*

1694. **Cavenagh, W. E.** *Day nurseries and the man-power problem.* *Brit. med. J.*, 1948, 1, 1184-1185.—The author raises serious question whether day nurseries during the war actually economized the use of woman-power and contributed to increase of man-power in work of national importance. Arguments are advanced showing that mothers so relieved from minding their children did not constitute a large enough quota in labor of sufficient national importance; that the majority of women having young children and who worked in lines essential to war effort did not send their children to nurseries; that day nurseries required personnel with some highly qualified people; that without subsidy the day nursery would have to raise its charge to the prohibitive point for the mothers of the working class.—*F. C. Sumner.*

1695. **Hartley, Eugene L., & Krugman, Dorothy C.** *Note on children's social role perception.* *J. Psychol.*, 1948, 26, 399-405.—22 pictures were presented 33 children from 6.5 to 10.5 at a YM and YWHA day camp. Responses to the following 4 sets of materials were studied: (1) pictured father-worker, (2) pictured mother-worker, (3) real father-worker, (4) real mother-worker. There are some differential rates in development of perception of the role of parent as compared with the role of worker. The author suggests this technique might enable further examination of factors determining the selection of a particular frame of reference in an ambiguous or complex situation.—*R. W. Husband.*

1696. **Hunter, Walter S., & Bartlett, Susan Carson.** (*Brown U., Providence, R. I.*) *Double alternation behavior in young children.* *J. exp. Psychol.*, 1948, 38, 558-567.—"1. Thirty-one children ranging in chronological age from two years to six years and nine months were trained on a double alternation box-apparatus. The youngest child to attain the criterion of three successive errorless trials of eight responses each was three years and seven months old. Younger children could perform double alternation, but at a lower criterial level. 2. There was a positive correlation between trials to learn and both C.A. and M.A. 3. Children five years old or older could state verbally the principle of double alternation by the time they had reached the criterion of learning. Younger children could not do so, even though they had mastered the problem. 4. Children at least as young as three years and seven months can extend their double alternation responses beyond the length of the series on which they have been trained. 5. The double alternation problem is not as well adapted to the behavior characteristics of the young child as is the delayed reaction test, al-

though both appear to involve in their mastery a symbolic process . . ."—*D. W. Taylor*.

1697. Irwin, Orvis C. (*U. Iowa, Iowa City*) **Infant speech: speech sound development of sibling and only infants.** *J. exp. Psychol.*, 1948, 38, 600-602.—Speech sound data for only infants and for infants with older siblings were analyzed in terms of phoneme type and of phoneme frequency. The results showed that "the presence of siblings in the family has negligible effect upon the speech sound development of infants."—*D. W. Taylor*.

1698. Kendall, Barbara S. (*Washington U., St. Louis, Mo.*) **A note on the relation of retardation in reading to a performance on a Memory-for-Designs Test.** *J. educ. Psychol.*, 1948, 39, 370-373.—For a sampling of 149 children, ranging in age between 6 and 16, no significant relationships were found between retardation in reading, as measured by standard reading tests, and difficulty in visual-motor integration, as measured by the author's Memory-for-Designs Test.—*E. B. Mallory*.

1699. Lambert, Clara. **Understand your child—from 6 to 12.** *Publ. Affairs Pamph.*, 1948, No. 144.—Ages 6 to 12 are described as the "forgotten years of childhood." Each age is briefly described, the largest amount of space being given to the 6-year-old who is going through the crucial period of being weaned from home and parental supervision. The 7-year-old is grappling with the place of "authority" in his life, while the 8-year-old is beginning to look beyond the confines of home and school in trying to understand distant places, peoples, and new ideas. The 9-year-olds are said to be entering pre-adolescence; they show a great need for group belongingness and hero worship. The years from 10 to 12 are grouped together as a period of gradual sexual maturation which bring with it sex worries, desire for adventure, and independence. Practical hints for parents are included; they are based on the premise that "knowing what to expect" will enable parents to cope with whatever problems arise. At all ages love and understanding are the most important single factors in lessening tensions between parent and child.—*E. W. Gruen*.

1700. Leontiev, A. N. **Problemi detskoi i pedagogicheskoi psikhologii.** (Problems of child and pedagogical psychology.) *Sovetsk. pedag.*, 1948, No. 2, 63-72.—"The new problem of psychology is the study of the Soviet man, the man of the era of the gradual transition to communism. Our psychology has renounced the pseudo scientific position that there is a 'general-man', an unchanging man. We have adopted the Marxist position that the psyche of man has an historical nature, that he changes together with changes in the social-economic relationships of people and in dependence on those changes. . . . The problem of our child psychology is to study the development of the psyche of the child from the standpoint of those of its qualities which are formed in the system of social relationships and by communist education. . . . It is clear that the psychological traits which bourgeois psychology

talks about as belonging to age, sex, and level of intellectual development are in the final consideration the product of capitalist society and its ideology." Specific areas which must be studied are motivation, cognitive processes, methods of study, and the development of moral traits.—*R. A. Bauer*.

1701. Leontiev, A. N. **K teorii razvitiia psichirebionka.** (An approach to a theory of the development of the child.) *Sovetsk. pedag.*, 1945, No. 4, 34-44.—The changes which are observed at each stage of the child's development do not evolve independently of each other, but are related by internal dynamics. However, the child's development does not proceed primarily from the internal dynamics of these relationships, but from his situation in the real world. Within each given stage the process of development proceeds along two lines. The decisive influence is effected by changes of his position in the system of social relationships. The secondary influence is effected by the child's behavior within the system of the major activity which characterizes that particular stage of development. The key concept in the author's scheme is that of the "leading" or major activity. Thus, the leading activity of the preschool stage is play, and the child's life experience is organized around his play activities.—*R. A. Bauer*.

1702. Piaget, Jean. (*U. Geneva, Switzerland*) **La naissance de l'intelligence chez l'enfant.** (The birth of intelligence in the child.) Neuchatel: Delachaux & Niestlé, 1948. 370 p. 10 fr. Swiss.—Topics discussed in this second edition include the sensory-motor basis of intelligence, the elementary forms of representation, the beginning of imitation, play, and the formation of the symbol. Even verbal intelligence is based on the sensory-motor. A study of the development of spatial representation leads to the idea of continuity between sensory-motor and representative intelligence. Among other matters considered are certain biological problems, the exercise of reflexes, the first acquired adaptations, circular reaction, the application of experience to new situations, and invention. Intelligence is considered as adaptation, and adaptation is equilibrium between assimilation and accommodation. (see 12: 993)—*G. E. Bird*.

1703. Sadler, William S. (*533 Diversey Parkway, Chicago, Ill.*) **A doctor talks to teen-agers; a psychiatrist's advice to youth.** St. Louis, Mo.: C. V. Mosby, 1948. 379 p. \$4.00.—In a volume "directed personally to young folks" the problems of adjustment in the major areas of adolescent experience and behavior are discussed. Asserting that "the majority of young people suffer from more or less emotional stress and nervous strain during the years which intervene between childhood and adulthood," the author offers practical counsel in an informal and non-technical way toward the effective solution of youth's problems. Difficulties associated with personal, social, and emotional development are considered. Other topics treat of educational and vocational adjustment, health, heredity, and recreation.

Guidance in the area of sex and marriage comprises 6 of the 25 chapters. Some attention is given to the role of religion and idealism in the life of the adolescent.—R. C. Strassburger.

1704. Slonimsky, Nicolas. *Musical children: prodigies or monsters?* *Etude*, 66(10), 591-592.—There are no child prodigies of the 'cello, clarinet, flute, or voice, and few in the area of composition. At present there is a rash of child-prodigy conductors. It is held that a definite sign of precocity is the presence of absolute pitch.—P. R. Farnsworth.

1705. Valeri, Mario. *L'educazione e il giudizio morale del fanciullo secondo Jean Piaget.* (Education and the moral judgment of the child according to Jean Piaget.) *Riv. Psicol.*, 1947, 43, 182-186.—The author sees implications for the education of the child in Piaget's "Moral Judgment of the Child" despite Piaget's admitted unconcern with such. The present author sets forth (1) Piaget's method, namely that of letting the children speak for themselves about the origin of the rules of their games; (2) Piaget's stages in moral development; (3) finally Piaget's position somewhat dubious on the significance of children's play as a preparation for adult practice of democracy. The present author is of the opinion that Piaget's study does not explore sufficiently the relations between children and adults and that just in this area he would find that parents are not always to be regarded as synonymous with agents of restraint, that at the cooperative stage parents as well as children can be trained to democratic cooperation.—F. C. Sumner.

1706. Volberding, E. (U. Utah, Salt Lake City.) *Out-of-school behavior of eleven-year-olds.* *Elem. Sch. J.*, 1948, 48, 432-441.—Data regarding out-of-school activities over a one-year period were obtained on 80 eleven-year-old children from a midwestern community. These data were collected by means of an individual map test, by interviews with adults and children, observation, questionnaires, compositions, and standardized tests. All the children belonged to small intimate play groups, and participated occasionally in the larger neighborhood play groups; the living space of the children was found to be quite restricted. The majority liked twilight play and competitive group play, but disliked rough play. Family social status was a differentiating factor in play preferences. Movies (western, action, comedy), roller skating, and radio (mysteries, comic programs, westerns) followed after play with other children in order of importance. Little recreational reading or club membership was reported. Similarities and differences compared with adolescent interests and activities are pointed out.—G. H. Johnson.

1707. Volokhitina, M. N. *K psichologicheskoi kharakteristike povedenija detei-semiletok v shkole.* (The psychological characteristics of the behavior of the seven year old in school.) *Sovetsk. pedag.*, 1945, No. 8, 41-50.—The child enters the Soviet school at the age of seven, and this period is a critical one in his life. The author made these observations during the first quarter of 1944-45. The observations show

the fact that starting school has a considerable effect on the conduct of children. During the first months they are in a state of transition, and their behavior is characterized by inhibition and restraint. The next period is one of incorporating the child into the life at the school. By the end of this period, his interest is focused on the process of learning and he has gone far toward becoming a "school child."—R. A. Bauer.

1708. Webber, Vera J. (*Madison School, Syracuse, N. Y.*), & Hunnicutt, C. W. *Children's ability to perceive change of color in painting.* *Elem. Sch. J.*, 1948, 48, 494-497.—Tests were constructed by the authors using three watercolor paintings (an orange, a vase, and a kettle); areas of color change were outlined on the paintings and color samples matched with the areas. Grades I through IX were tested, 409 children taking the orange test, 407 the vase test, and 412 the kettle test. Results were tabulated by age, grade, sex and ethnic group. 14% of the responses of 5-year old children were correct, the percentage rising progressively to 43% at the fourteenth year, indicating a natural process of maturation. A difference between sexes significant at the 1% level of confidence was found after correcting for sex difference in colorblindness. Jewish children were superior in the ability to see change in color. Using 26 children for whom mental ages were available, correlations with test scores of from .14 to .41 were obtained.—G. H. Johnson.

[See also abstracts 1547, 1637, 1739, 1740, 1770, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1814, 1815, 1816, 1867, 1900, 1901, 1930, 1937.]

MATURITY & OLD AGE

1709. Cosin, L. C. (*Orsett Lodge Hosp., Essex County, Essex, Eng.*) *Geriatric rehabilitation.* *Geriatrics*, 1948, 3, 294-295.—"The aim of geriatric rehabilitation is to restore the maximum degree of painless movement by means of active physiotherapy and remedial exercises, resulting in the maximum of personal independence." Chief factors in rehabilitation include the visible improvement of other patients similarly incapacitated and a generally hopeful environment.—R. G. Kuhlen.

1710. Critchley, Macdonald. (*Nat'l Hosp., Queen Square, London, Eng.*) *On senile disorders of gait, including the so-called "senile paraplegia."* *Geriatrics*, 1948, 3, 364-370.—Weakness of the legs, when appearing in old age, may be due to many causes, at various levels of the nervous system. Since involutional changes are commonly diffusely distributed throughout the body, it would be exceptional to meet with "pure" types of paraplegia, due to lesions confined to one particular region. The term "senile paraplegia" is therefore not altogether appropriate in clinical neurology. 20 references.—R. G. Kuhlen.

1711. Johnson, Wingate M. (*Wake Forest Coll., N. C.*) *The years after fifty.* New York: Whittlesey House, McGraw-Hill, 1947. xii, 153 p. \$2.00.—

The purpose of this volume is "to help the intelligent man and woman prepare for the later half of life, through discussion of the various problems—physical, mental and to some extent spiritual—that are peculiar to this period." A first step involves taking stock of physical and mental assets and liabilities. Among the more common sources of fear are high blood pressure, heart disease, loss of sexual vigor, mental deterioration, economic insecurity, and dying. Separate chapters discuss blood pressure, respiratory disorders, circulatory diseases, digestive disorders, diet, rheumatism and arthritis, endocrine changes, mental changes, exercise and recreation, and preparation for old age. Association with young people, a gradual stepping out of vocational responsibilities, the cultivation of equanimity, and the development of broad interests are recommended. Preparation for old age must be begun early.—R. G. Kuhlen.

1712. Lovell, Harold W. (*Payne Whitney Clinic, New York Hosp., New York.*) **Electric shock therapy in the aging.** *Geriatrics*, 1948, 3, 285-293.—The types of cases most likely to benefit from electro-shock therapy are arranged as follows, in order of the most favorable to the least favorable: Involutional melancholia, depressive reaction of manic-depressive illness, manic reaction of manic-depressive illness, neurotic states and reactive or situational depressions, acute delusional reactions and schizophrenic states, organic reaction types. In the series of depressed cases treated by the author, good results were obtained in 80% of the cases under 64 years but in only 34% over that age. Recovery in reactive depressions was 66%, in manic-depressive depressions 84%, for chronic neuroses 54%, and "below 30%" for schizophrenic and acute delusional states. Proper preparation of the patient and his relatives for both the treatment and the after-care is essential; a careful preliminary physical examination should never be neglected. "The value of follow-up psychotherapy cannot be overemphasized. There is no question but that patients who are not followed psychotherapeutically after shock therapy do not respond so well."—R. G. Kuhlen.

1713. Moore, Elon H. (*U. Oregon, Eugene.*) **Community organization for older persons.** *Geriatrics*, 1948, 3, 306-313.—"The development and organization of a few community resources to meet the more basic needs of the older population is achieved in ways similar to community organization for other purposes. . . . The chief needs demanding attention are suitable living locations, some interesting and useful activity, and giving older persons confidence in themselves." Various examples of efforts to provide housing, social and special interest outlets, work outlets and counseling centers for the old are discussed.—R. G. Kuhlen.

1714. Pollak, Otto. (*U. Pennsylvania, Philadelphia.*) **Social adjustment in old age: a research planning report.** New York: Social Science Research Council, 1948. 199 p. \$1.75. (*Soc. Sci. Res. Coun. Bull.*, No. 59.)—Though old age may be vari-

ously defined, it is feasible to set 60 years as the lower age limit of future research interest, but for certain problems the population must include younger ages. "Social science research . . . should concentrate on the phenomena of change which aging implies, on the problems of adjustment which these phenomena of change present, and on the types of adjustive behavior which lead to their solution. . . . Analysis of the adjustment process of the individual must take account of *needs* and *rewards*, and as many additional factors—*capacities*, *opportunities*, and *predispositions*—as are necessary to explain the process and the result." In aging problems arise from (1) decline in capacities which lessen the effectiveness of previous methods of satisfying needs, and (2) changes in social role and status assignments as a given chronological age is reached. Psychological research on "individual adjustment" to problems should provide (1) data on the problems of aging, (2) a description and explanation of the adjustive reaction of old people to their problems, and (3) valid and convenient tests of adjustment level. Separate chapters are devoted to old age and the family, making a living, attitudes toward and adjustment to retirement, and other institutional fields. Demographic statistics provide important background for psycho-cultural research in these areas. 413-item bibliography.—R. G. Kuhlen.

1715. Simmons, Leo W. (*Yale U., New Haven, Conn.*) **Old age security in other societies.** *Geriatrics*, 1948, 3, 237-244.—"The experience of growing old varies widely with different people, perhaps even more than that of growing up. . . . At one extreme, old age is considered a curse and, at the other, a challenge." There is no good index—chronological or otherwise—that determines just when old age begins, but a wide transitional period exists differing among different peoples and with station in life. Regardless of time or place, most old people want to live as long as possible, seek to safeguard and preserve their waning energies, seek to remain active in personal and group affairs, and try to safeguard and strengthen any prerogatives acquired in life thus far. In general, the quest for security involves economic adjustments, opportunities in government, privileges and powers in the family, advantage gained through experience and knowledge. Contrasts between primitive and civilized societies with respect to average length of life (and thus the relative proportion of old people in the culture), the proportion of old remaining active and productive, the degree to which aging and adjustments to aging are tapered or abrupt, attitudes toward death, and the extent to which the cultural context is geared to aging, suggest that some very serious losses have come to old people with the advance of civilization.—R. G. Kuhlen.

1716. Vischer, A. L. **Old age; its compensations and rewards.** New York: Macmillan, 1948. 200 p. \$3.50.—This is a translation by Bernard Miall of the second edition of *Das Alter Als Schicksal und*

Erfullung (1945). The changes and problems occurring with aging are described and discussed in the light of available research under 3 major headings: (1) senescence as a bodily and mental process, (2) the duration of life, (3) society and the individual: their attitude toward old age. "Everyone who has concerned himself with this problem knows that this branch of research is still in its infancy. While the study of the period of growth is facilitated by the orderly succession of the processes of growth and puberty, the contrary process of involution does not follow such definite laws. Actually, the aging organism can be understood only as the result of the preceding life-history. To a great extent the process of aging follows laws peculiar to the individual. . . . As far as our present knowledge of the subject goes, the span of human life [the limits of longevity which cannot be exceeded under the most favorable conditions] has not altered." Although men of all ages have felt the advance of age to be an evil, periods of history and individuals alike vary in the extent to which they resign themselves to the irrevocable, or take the sorrows of age, and the dread of its advent, seriously enough to speak of them to the world and posterity. The attitudes towards one's own old age, and to old and aging people in general, varies greatly among people of different civilizations, and it changes also in the course of time." 21 references.—*R. G. Kuhlen.*

1717. Watters, T. A. (*De Paul Sanitarium, New Orleans, La.*) The neurotic struggle in senescence. *Geriatrics*, 1948, 3, 301-305.—"The conscientious physician can orient himself best for his clinical task by conceiving of the human being in terms of his life cycle, not in the narrow biological sense, but from the standpoint of certain psychological problems inevitably faced by each individual. For example, it is noted that evolving from the critical times in early childhood, known as the preoedipal and oedipal periods, problems of dependence and domination, of love and hate may develop, throwing the personality into conflict. These problems may be adequately or inadequately solved, thus entailing a dynamic struggle within the personality and with other individuals throughout the life span. These problems are either mastered in such a manner that the person matures normally, or he may never learn just how to deal with them and remain emotionally immature or neurotic throughout his life. Such inability to learn, or interruption in the learning process early in life, constitutes the basis for the neurosis. This failure leaves unsolved a potential nucleus or source of trouble which at any point may repeatedly erupt in response to the vicissitudes of temptation and trauma, accident, disease, and medical intervention, which when studied carefully, may be found to be specific causes or situations calling forth the neurotic response. Included also may be disturbances of the biological functions, some of which have been well described in the formulations of psychosomatic research."—*R. G. Kuhlen.*

SOCIAL PSYCHOLOGY

1718. Abel, Theodore. (*Columbia U., New York.*) The operation called *Verstehen*. *Amer. J. Sociol.*, 1948, 54, 211-218.—The postulate of *Verstehen* is the main argument of social theorists who assert the existence of a dichotomy between the physical and social sciences. An analysis of the operation of *Verstehen* shows that it does not provide new knowledge and that it cannot be used as a means of verification. Lacking the fundamental attributes of scientific method, even though it does perform some auxiliary functions in research, the fact of *Verstehen* cannot be used to validate the assumption of a dichotomy of the sciences.—*D. L. Glick.*

1719. Alpenfels, Ethel. (*New York U.*) Work and play as seen by an anthropologist. *Childh. Educ.*, 1948, 25, 149-152.—Contrasted to primitive societies, our modern industrialized society has separated play and work into two very different activities, performed under totally different circumstances, and with different goals and attitudes. The schools should work toward lessening this artificial division between work and play.—*G. H. Johnson.*

1720. Cattell, Raymond B., & Wispe, Lauren G. (*U. Illinois, Urbana.*) The dimensions of syntality in small groups. *J. soc. Psychol.*, 1948, 28, 57-78.—21 groups of undergraduate women (6 in each) served as subjects in a series of experiments planned to disclose syntality, i.e., behavior of groups *per se*, in terms of ability, temperament, and dynamic traits. Test performances and quantitative data of intra- and inter-group behavior throughout a wide range of situations were analyzed by correlational and factor analysis. The resultant factors resembled individual personality factors but the findings are inconclusive in distinguishing group syntality from individual personality patterns of behavior.—*J. C. Franklin.*

1721. Friedman, Paul. The road back for the DP's. *Commentary*, 1948, 6, 502-510.—The reintegration of displaced persons into society involves more than merely providing a place to work and live. The psychological effects of concentration camps profoundly effected the total personality organization, and very definite procedures of psychotherapy and general mental hygiene are necessary if these persons are to be adequately readjusted. In this article the author discusses his experiences in working with individuals and groups of displaced persons, especially Jews.—*C. M. Louttit.*

1722. Kecskeemeti, Paul, & Leites, Nathan. (538 East 85th St., New York, 28.) Some psychological hypotheses on Nazi Germany. IV. *J. soc. Psychol.*, 1948, 28, 141-164.—The fourth and final section of a study of the Nazi and German character and personality. The bipolarized trait approach the burden of which is to support a diagnosis of clinical compulsion of the German people and culture is concluded under the headings of *Rationalism and Irrationalism, Individualizing and Generalizing Attitudes, Withdrawal and Submersion, Omnipotence and Im-*

potence, Self-esteem and Self-contempt. 33 references.
—J. C. Franklin.

1723. Krech, David (*U. California, Berkeley.*), & Crutchfield, Richard S. *Theory and problems of social psychology.* New York: McGraw-Hill, 1948. xv, 639 p. \$4.50.—"This book is designed for the teacher and the student who are primarily interested in the *science* of psychology as a systematic, interpretive account of human behavior and who are interested in *applying the science* of psychology to current social issues." The first section ("Basic principles") contains 4 chapters on the area and problems of social psychology, dynamics of behavior, perception and perceptual reorganization. The theoretical framework presented here has the overall characteristics of the Gestalt and Tolman views. Part two ("Social processes") deals mainly with beliefs and attitudes. There are also chapters on public opinion research; propaganda; the structure, dynamics, morale, and leadership of groups. The third part ("Applications") describes and analyzes racial prejudice and means of controlling it, industrial conflict, and international tensions. Bibliographies at the end of chapters.—B. R. Fisher.

1724. Luft, Joseph, & Wheeler, W. M. (*U. California, Los Angeles 24.*) *Reaction to John Hersey's "Hiroshima."* *J. soc. Psychol.*, 1948, 28, 135-140.—"On Aug. 31, 1946 the *New Yorker* devoted an entire issue to the account by John Hersey of . . . the effects wrought in the lives of six people by the first atom bombing." Analysis of a random sample of 399 spontaneously written reader-letters who expressed their reactions showed some 9% disapproved giving most often as their reasons "that they felt deprived of their usual humorous magazine material, that too much had been written already about the atom bomb, that the story was undesirable propaganda, and that they felt a hostile attitude toward Russia." Among the approximately 90% who approved most frequently mentioned in their letters were the "contribution [of the story] to public good," "appreciation of the author's style and ability," "expression of need for broader awareness of the implications of atomic warfare," "realization of what the bombing of Hiroshima meant in terms of human beings," "a feeling of responsibility for the dropping of the bomb," and "a feeling of anxiety regarding the future use of atomic weapons." —J. C. Franklin.

1725. Morris, Charles. (*U. Chicago, Ill.*) *The open self.* New York: Prentice-Hall, 1948. xi, 179 p. \$3.00.—A synthesis of psychological, philosophical, and religious viewpoints of the self in a fresh perspective. By excuses of irrationalism, determinism, and sin we evade the responsibility of man-making and culture-making. A survey of 1000 college students given 13 possible ways of life, indicates that 40% choose "dynamic integration of diversity." Relating Sheldon's constitutional typology of endomorph, mesomorph, and ectomorph with Horney's neurotic types of submission, aggression, and withdrawal, he shows that we must recognize

diverse needs and characters of individuals and permit each to develop his own style of life. This he calls an open society of open selves, in which democracy will encourage a diversity of interests to unite in mutual respect, freedom, and co-operation. Our most dangerous threat today is a closed society hounded by anxieties to be possessive, repressive, and inflexible. He summons us to create an open society.—P. E. Johnson.

1726. Redfield, Robert. (*U. Chicago, Ill.*) *The art of social science.* *Amer. J. Sociol.*, 1948, 54, 181-190.—In addition to the aspects of social science which are scientific as the physical sciences are scientific, social science is also an art. This art consists, in some part, of perceptive understanding of some aspect of human nature, the gift or skill in making significant generalizations as a derivative of such perception, and a fresh viewpoint that questions previous views. Because this aspect of social science requires development, it is well to recognize the relationship of social science to humanistic endeavors and to include in the preparation of social scientists, as such, a humanistic education.—D. L. Glick.

1727. Richardson, Lewis F. (*Hillside House, Kilmun, Argyll, Scotland.*) *War-moods: I. Psychometrika*, 1948, 13, 147-174.—The moods involved are friendliness, hostility, and war-weariness, superimposed upon the basic, underlying mood of the individual. The independent variable is time and the dependent variables are the numbers of persons in different war moods in the two hostile nations. The rate at which persons are converted from one mood to another is proportional to the number of susceptible persons and the number of influencing persons. The theory of Kermack and McKendrick regarding epidemics seems to be applicable. The formulations lead to differential equations similar to those of Volterra describing the interaction of predator and prey among fish. Part I is inductive, leading from facts, historical and psycho-analytical, regarding war attitudes in Britain and Germany (1914-1918), to mathematical descriptions. A later article will be deductive, leading from these descriptions to predictions with proofs. 42 references.—M. O. Wilson.

1728. Rosenthal, David, & Cofer, Charles N. *The effect on group performance of an indifferent and neglectful attitude shown by one group member.* *J. exp. Psychol.*, 1948, 38, 568-577.—"The problem of this study was to determine if non-participative behavior on the part of one group member, such as the manifestation of an attitude of 'indifference and neglect,' would produce measurable effects on attitudes toward the group goal of other group members and on both their individual levels of aspiration and their aspiration levels for the performance of the group. Male college students, assigned at random to the experimental and control subgroups, were used as *Ss.*" The experimental condition produced a significant decrease in belief in goal attainability and in belief "that other group members would whole-heartedly participate to

achieve the goal," as well as a decrease in ease of agreement in setting a group level of aspiration through discussion. Although a consistent difference was found between the group level and the individual level of aspiration, both seemed to follow about the same course and to be affected by success and failure in similar ways.—D. W. Taylor.

1729. Shils, Edward. (*London Sch. Economics, Eng.*) The present state of American sociology. Glencoe, Ill.: The Free Press, 1948. 64 p.—An "assessment of the achievements and shortcomings of American sociology," this pamphlet treats the areas of urban sociology, class stratification, ethnic groups, the family, religion, communications analysis and public opinion, the small group, and considers undeveloped areas in the field before reaching conclusions about current trends. Extensive references to the literature and research.—B. R. Fisher.

1730. Smith, George Horsley. (*Princeton U., N. J.*) The relation of "enlightenment" to liberal-conservative opinions. *J. soc. Psychol.*, 1948, 28, 3-17.—National poll results were analyzed to determine relationships between liberal and conservative attitudes, years of schooling, and ready information on current events. Results do not support the view that "enlightenment," education-information status, bears a simple positive relationship to the criteria. "The liberals were less educated and informed on government-influence, business-vs.-labor issues . . . the less literate poor were disproportionately represented among the liberals . . . liberals and conservatives responded in terms of rather narrow class and income-level interests, and . . . 'enlightenment' served primarily as a tool to the conservatives' purposes. . . . Liberals and conservatives were about equally enlightened on issues that seemed ambiguous, elicited evasion and concealment, or were answered with reference to other standards. . . ." Theoretical implications and applications of the findings are discussed as related to frame of reference and the changing of attitudes. 21 references.—J. C. Franklin.

[See also abstracts 1542, 1694, 1797, 1826, 1971.]

METHODS & MEASUREMENTS

1731. Bavelas, Alex. (*Massachusetts Institute of Technology, Cambridge.*) A mathematical model for group structures. *Appl. Anthropol.* 1948, 7(3), 16-30.—The concepts, diameter, periphery, and maximum distances between parts are formulated mathematically with reference to a representation of group structure as interconnecting cells. Two further properties, a measure of cohesiveness in terms of the number of cells in contact, and a measure of integration in terms of the distance between cells are also formulated. Application is shown to three types of group structures. A further measure of directness of communication within a group structure is also given.—L. M. Hanks, Jr.

1732. Gage, N. L. (*Purdue U., Lafayette, Ind.*) Scaling and factorial design in opinion poll analysis. *Proc. Ind. Acad. Sci.*, 1948, 57, 186.—Abstract.

1733. Williamson, Marjorie. (*Purdue U., Lafayette, Ind.*) Comparison of paper-and-pencil method and the radio method of polling public opinion. *Proc. Ind. Acad. Sci.*, 1948, 57, 186-187.—Abstract.

[See also abstract 1548.]

CULTURES & CULTURAL RELATIONS

1734. Allport, Gordon W. (*Harvard U., Cambridge, Mass.*) ABC's of scapegoating. (Rev. ed.) New York: Anti-Defamation League of B'nai B'rith, 1948. 56 p. 20¢.—The primitive ceremony of transferring the sins of a people onto a goat is described. Predilection leads to prejudice, prejudice expressed to discrimination, and discrimination to scapegoating. Motives back of scapegoating, sources of race prejudice in children, types of scapegoaters, what victims are chosen and their reactions, the forms scapegoating take, and the methods of combatting scapegoating are explained.—G. K. Morlan.

1735. Ansbacher, H. L. (*U. Vermont, Burlington.*) Attitudes of German prisoners of War: a study of the dynamics of National-Socialistic followership. *Psychol. Monogr.*, 1948, 62, v, 42 p.—Ansbacher presents the results on data collected from PW's in Italy, England and France. Questionnaires were administered to prisoners in captivity 4 days to 2 weeks. Numerous samples were used and "were selected from larger groups of prisoners, usually on the basis of availability or of least interference with the camp routine." Samples were "not selected as typical cross-sections of German population as a whole . . . [or] . . . as representative of the German Army but were accidental samples." The author reports the known biases in sampling: (1) exclusively males; (2) mostly under 30 years of age; (3) include an unduly small proportion of higher socio-economic levels and consisted only of privates plus a small number NCO's. Ansbacher establishes the reliability of the findings on the basis of (1) similarity of results from separate surveys; (2) internal consistency of interlocking information; and (3) internal consistency of replies to respondents' backgrounds. He considers his data to be both reliable and "reasonably valid." The results are discussed in part II which deals with, "Confidence in Hitler"; part III with "Attitudes toward National Socialism"; and part IV "Comparison with post-war civilian surveys." 11 references.—M. A. Seidenfeld.

1736. Cox, Howard L. The place of mythology in the study of culture. *Amer. Imago*, 1948, 5, 83-94.—Marquesan mythology as compiled by Handy is analyzed in a quasi-statistical manner in order to examine the validity of Kardiner's conclusions concerning the focal points (food, sex ratio, intrafamilial relationships, and basic disciplines) in Marquesan culture, to check the opinions of Freud and Abraham on the psychological significance of mythology, and

to show that mythology can be useful in understanding a particular culture.—*W. A. Varvel*.

1737. Deutscher, Max, & Chein, Isidor. (*American Jewish Congress, New York 19.*) The psychological effects of enforced segregation: a survey of social science opinion. *J. Psychol.*, 1948, 26, 259-287.—This report is an attempt to gather opinions of social scientists on the psychological effects of enforced segregation, both on the enforcing and the segregated groups. Are there detrimental effects? What effects are there when equal facilities (educational) are provided? 517 replies (61%) were secured from a list of 849 anthropologists, psychologists, and sociologists, selected for having interest in such problems. 90% felt that the segregated group experienced harmful effects, and 83% that the group which enforced the segregation also had detrimental effects. Analyses are made by profession, region, and basis of opinion. Numerous quotations are presented.—*R. W. Husband*.

1738. Devereux, George. Mohave Indian obstetrics: a psychoanalytic study. *Amer. Imago*, 1948, 5, 95-139.—"An examination of Mohave belief and practices concerning childbirth revealed that a number of interpretations, originally formulated on the basis of the psychoanalytic study of European and American analysands, appear to shed some light also on Mohave Indian psychodynamics. At the same time it is felt that the psychoanalytic study of the reproductive process in other cultures is considerably less advanced at present than is the comparative, cross-cultural study of psychosexual developmental stages." The writer believes that this is the first psychoanalytical investigation of primitive obstetrics. 56-item bibliography.—*W. A. Varvel*.

1739. Hartley, Eugene L., Rosenbaum, Max, & Schwartz, Shepard. (*American Jewish Congress, New York 19.*) Children's perceptions of ethnic group membership. *J. Psychol.*, 1948, 26, 387-398.—Ethnic and other roles were studied by interview with 86 children, 41 "nominally" Jewish. Can you be both American and Jewish? Are you ever just American and not Jewish? Both permanent and momentary roles are recognized, as in aggressive and abusive situations.—*R. W. Husband*.

1740. Hartley, Eugene L., Rosenbaum, Max, & Schwartz, Shepard. (*American Jewish Congress, New York 19.*) Children's use of ethnic frames of reference: an exploratory study of children's conceptualizations of multiple ethnic group membership. *J. Psychol.*, 1948, 26, 367-386.—This study undertook to test identification of children with ethnic group symbols from ages of 3.5 to 10.5. Jewish, Catholic, and Protestant children were interviewed, some of the latter being colored. Typical questions: Are you Jewish? What does it mean to be Jewish? Can you be Jewish and American? Frames of reference develop with age, and different situations evoke different types of reference frames, which differ from adults' frames.—*R. W. Husband*.

1741. Highbaugh, Irma. (*Agricultural Missions, Inc., 156 Fifth Ave., New York 10.*) Family life in West China. New York: Agricultural Missions, Inc., 1948. xi, 240 p. \$2.00.—The work describes the service program conducted by a Christian mission in two rural communities of Szechuan province during the years 1941-1944. Book I depicts in novelesque manner daily events with Chinese families, showing certain characters in the communities under study, particularly a nursery-school aged boy and girl, and the reaction of the community members to various features of the program. Book II presents the program with the considerations for selecting the particular communities and describes the nursery school, primary school, adult literacy class, 4H and youth clubs, health clinics and religious classes, together with excerpts from selected sessions and estimates of the results. Book III details the methods of study, particularly a check list which was found useful in training students as well as securing information. A brief general bibliography and a glossary of Chinese terms.—*L. M. Hanks, Jr.*

1742. Hsu, Francis L. K. (*Northwestern U., Evanston, Ill.*) Under the ancestors' shadow; Chinese culture and personality. New York: Columbia University Press, 1948. xiv, 317 p. \$3.75.—The characteristic patterns of behavior in a small semi-rural community in southwest China are described, with particular attention to patterns of family and religious life. Analysis of the culture of the community reveals the two most important influences upon the basic personality type to be authority and competition, the former deriving from ancestral tradition and operating through the father-son tie, and the latter carried on within a framework determined by such authority. The most important status personality configuration difference occurs between the rich or highly placed and the poor or lowly placed. The end results of authority and competition applied to both these groups are radically different, and are offered as the explanation of the cycles of the rise and fall of families and dynasties.—*C. F. Scofield*.

1743. Kroeber, A. L. Seven Mohave myths. Berkeley: University of California Press, 1948. (*Anthrop. Rec.*, 11, No. 1). vii, 70 p. \$1.25.—Here are given the myths: Cane, Vinimulye-patse, Nyohaiva, Raven, Deer, Coyote, Mastamho. Each is in form punctuated with a series of songs at frequent intervals and takes one to three days for completion. The content is said to derive from dreams which place the dreamer in contact with supernatural powers and enable him to witness events occurring near the beginning of the world. An account of the informant, the circumstances of its telling and an analysis of content occurs with most of these myths.—*L. M. Hanks, Jr.*

1744. Lourié, Anton. The Jewish God and the Greek hero. *Amer. Imago*, 1948, 5, 152-166.—The present paper is the introductory chapter of a book in preparation which attempts a psychoanalytic search into the "Jewish personality." "The theory

is set forth that the Jew, as a psychologic type is determined by a specific pattern of resolving the oedipus complex, and that other national types are similarly characterized by specific patterns of repression. This is first demonstrated by contrasting the Jewish and Hellenic trends in the 'shadowgraph' of mythology and ritual. . . . At the same time, it is stressed that the value of mythology as a source for such studies is limited." In Jewish ritual and mythology filial submission became so all-important as to exclude any other ideology.—W. A. Varvel.

1745. MacKenzie, Barbara Kruger. (*Brooklyn Coll., N. Y.*) The importance of contact in determining attitudes toward Negroes. *J. abnorm. soc. Psychol.*, 1948, 43, 417-441.—College students and employees in a government agency were polled with a data sheet and an 11-item attitude scale concerning work habits and social acceptability of Negroes. In these groups, acquaintance with Negroes of high occupational status is associated with more favorable attitude. So too, variety of contacts with Negroes is associated with more favorable attitudes. Willingness to associate with Negroes is a general factor applying in many situations, and willingness to eat at the same table is the most reliable indicator of general attitude. The large attitude difference between a Northeastern and a Midwestern college group may result from different kinds of contacts with Negroes in these areas. 28-item bibliography.—C. M. Harsh.

1746. Rosen, Irwin C. (*U. Pittsburgh, Pa.*) The effect of the motion picture "Gentleman's Agreement" on attitudes toward Jews. *J. Psychol.*, 1948, 26, 525-536.—Attitude toward Jews, defined as score on the Levinson-Sanford "Questionnaire on Anti-Semitism," as measured before and after seeing the movie "Gentleman's Agreement." Jewish students, and those who had already seen the movie or read the book, were excluded. As control, half the group saw the movie before the second half of the questionnaire was completed, and half had not yet seen it. One day after seeing it, the attitude was more favorable toward Jews (CR = 2.62), and three days after it was 2.26. In an essay on opinions, most predicted that the public would have attitude changes, rather than that they themselves had experienced such.—R. W. Husband.

1747. Sato, Koji, & Nakano, Fuyuo. (*Doshisha U., Tokyo, Japan.*) Nationality preferences of Japanese students after World War II. *J. soc. Psychol.*, 1948, 28, 165-166.—Data obtained from 917 junior college and high school boys and girls yielded the following high to low rankings: Japanese, American, German, French, English, Italian, Chinese, Indian, Russian, Jewish, Negro, Korean. The editor (L. J. Cronbach) comments that "the low rankings of Negro and Jew in Japan are striking, since the Japanese have had little direct contact with either group."—J. C. Franklin.

[See also abstract 1940.]

SOCIAL INSTITUTIONS

1748. Arthaud, R. L., Hohneck, A. N., Ramsey, C. H., & Pratt, K. C. The relation of family name preferences to their frequency in the culture. (*Central Michigan Coll. Educ., Mt. Pleasant.*) *J. soc. Psychol.*, 1948, 28, 19-37.—Preferences, in terms of paired-comparison scale values, for surnames, were obtained from 201 midwestern college students. Preferences for original vs. Anglo-Saxon forms and personal satisfaction and dissatisfaction with their own surnames—together with their reasons—were investigated. Names occurring with least and greatest frequency in the population were least preferred by both men and women. More women (33%) than men (26%) were dissatisfied with their surnames. Two-thirds of the dissatisfied had non-Anglo-Saxon names, of these 80% would select anglicized family names for themselves. "Family names are more likely to be satisfactory to their possessors than are given names." Length, difficulty of spelling and pronunciation, complexity, esthetic quality, and cultural factors are discussed as they influence surname preferences.—J. C. Franklin.

1749. Devolder, P. N. (*47 Rue des Flamands, Louvain, Belgium.*) Inquiry into the religious life of Catholic intellectuals. *J. soc. Psychol.*, 1948, 28, 39-56.—Questions dealing with respondents' religious life, practices, and opinions together with personal data were answered and submitted anonymously by 785 men and women who were church-going Roman Catholic intellectuals. The author interprets his data as demonstrating that "religious conviction based more on sentiment and tradition [rather] than on logical [theological] grounds is apt to lead to misunderstandings" and failure to see through lack of knowledge of their religion the "conflict between social moral law and religion."—J. C. Franklin.

1750. Flesch, Regina. (*Family Serv. Bur., Chicago, Ill.*) Treatment goals and techniques in marital discord. *J. soc. Casewk.*, 1948, 29, 382-388.—The two basic types of treatment discussed are the supportive and insight therapies. It is pointed out that in marital problems, the giving of insight is not necessary for effective therapy. The relationship between client and worker is the essential factor, and the worker's attitude is the elementary step in treatment.—V. M. Stark.

1751. Infield, Henrick F. (*Rural Settlement Institute, Van Wagner Rd., Poughkeepsie, N. Y.*) Cooperation in resettlement and rural rehabilitation. *Appl. Anthropol.*, 1948, 7(3), 1-7.—Two agricultural types of ventures are described with particular reference to the conditions leading to and the kinds of cooperation. The Kvutza of Palestine arose out of the socialistically motivated desire of Zionists to avoid exploitation and at the same time to become owners of their own property. The Rochedale principles of collective production did not give women equal status, so that collective living with common nurseries, kitchens, and dormitories were

added. The Saskatchewan cooperative farms arose from the needs for economic security, social contacts, fair provision for the children of farms, and land resources for veterans.—*L. M. Hanks, Jr.*

1752. Lehman, Ruth Townsend. *Experimentation with attitude scales in the area of home and family life education.* Chicago: University of Chicago Library, Dep. of Photographic Reproduction, 1947. 150 p.—Microfilm copy of typewritten thesis (150 p.). 4-page bibliography.

1753. Price, Daniel O. (U. North Carolina, Chapel Hill.) *Non-white migrants to and from selected cities.* *Amer. J. Sociol.*, 1948, 54, 196-201.—A comparison of the age distributions of nonwhite migrants to and from 15 cities of over 100,000 population with the age distributions of all migrants to and from these cities enables us to infer several characteristics of the migrants. Nonwhite migrants, more than white migrants, tend to be single persons or childless couples and to be more concentrated in the highly employable ages. Nonwhite out-migrants are more concentrated in the ages from 18 to 29 than are the nonwhite in-migrants. Out-migrants from cities of over 100,000 population are older than the in-migrants.—*D. L. Glick.*

[See also abstracts 1918, 1935.]

LANGUAGE & COMMUNICATION

1754. Clark, K. C., Rudmose, H. W., Eisenstein, J. C., Carlson, F. D., & Walker, R. A. (Harvard U., Cambridge, Mass.) *The effects of high altitude on speech.* *J. acoust. Soc. Amer.*, 1948, 20, 776-786.—"The effects of altitude on the human voice have been determined by measuring speech spectra as a function of altitude. The apparatus simultaneously recorded the square of the sound pressure in twelve contiguous bands extending from 60 to 9000 c.p.s. Eleven talkers were used, and data were obtained in a decompression chamber at constant temperature for altitudes up to 40,000 feet. . . Vowels, sibilants, words, and connected speech were used as test material. The results indicate that vowels and semi-vowels exhibit a loss in mean square pressure with altitude roughly proportional to the logarithm of the density ratio, while some consonants are little affected by altitude. Measurements indicate that the number of words spoken on one breath of air is proportional to air density if constant sound pressure output is required. Normally, at 35,000 feet, it is necessary to pause for breath about two to three times as frequently as at sea level."—*W. R. Garner.*

1755. Harris, Chester W. (U. Wisconsin, Madison.) *An exploration of language skill patterns.* *J. educ. Psychol.*, 1948, 39, 321-336.—Data made available through the Evaluation of Indian Education Project at the University of Chicago were used in this study. A factorial analysis of English language skills was based on 15 "language skill variables," measured by scores on four Types of the Gates Basic Reading tests, on sections of the Pressey English Test, and other records. The tech-

nique employed was an adaptation of "cross-sampling validation" to the problem of the rotation of the orthogonal axes derived from a constant factor solution of a correlation matrix. Four factors were found, and other factors suggested in parts of the material. Certain differences between results from the Montana and Pueblo groups may derive from the fact that English was, in general, learned later in the Pueblo area.—*E. B. Mallory.*

1756. Karwoski, T. F., & Schachter, J. (Dartmouth Coll., Hanover, N. H.) *Psychological studies in semantics: III. Reaction times for similarity and difference.* *J. soc. Psychol.*, 1948, 28, 103-120.—Results and discussion of them are given for six experiments dealing with "free association reaction times, reaction times for similarity and difference judgments for concrete nouns, comparison of reaction times for similarity and difference judgments of abstract and concrete nouns, reaction times judgments of good and bad for a list of adjectives, the relation between similarity-difference judgments and good-bad judgments, and the reliabilities of the group similarity-difference and the group good-bad word list. . . . Preliminary results are reported for the possibility of using the techniques . . . to differentiate personality factors in thinking." 24 references.—*J. C. Franklin.*

1757. Korzybski, Alfred. *Science and sanity; an introduction to non-Aristotelian systems and general semantics.* (3rd ed.) Lakeville, Conn.: The International Non-Aristotelian Library Publishing Co., 1948. lxxiv, 806 p. \$8.00.—As the opening paragraph of the short 3rd-edition preface indicates, there is nothing to be added to the two previous abstracts (see 8: 1910, 1st ed.: 16: 1309, 2nd ed.). The author asserts that the genuine application of the methods of general semantics shows beneficial results in law, medicine, business, education on all levels, and personal inter-relationships in family, national or international fields. 619-item bibliography.—*J. R. Kantor.*

1758. Murray, Elwood. (U. Denver, Colo.) *Combining general semantics with sociodrama; for a laboratory method in the social sciences.* *Sociometry*, 1948, 2, 69-72.—Sociometry and sociodrama permit communication behavior to be observed and studied. General semantics provides the basis for evaluating this behavior. Criteria are given for evaluating role behavior, and procedures outlined for presenting sociodramas.—*R. B. Ammons.*

1759. Nelson, Lowry. (U. Minnesota, Minneapolis.) *Speaking of tongues.* *Amer. J. Sociol.*, 1948, 54, 202-210.—Approximately one-fifth of the white population of the United States reported a mother-tongue other than English in 1940. Those reporting German, Polish, Italian, Spanish, Yiddish, and French each numbered over a million persons. Using the percentage of each language group which was native of native parents as a rough indicator of persistence, wide differences by language, by geographic area, and by rural-urban residence are revealed.—*D. L. Glick.*

1760. Watson, Jeanne, Breed, Warren, & Posman, Harry. (440 Riverside Dr., New York, 27.) A study in urban conversation: sample of 1,001 remarks overheard in Manhattan. *J. soc. Psychol.*, 1948, 28, 121-123.—"One thousand and one bits of overheard conversations were collected from a variety of unstructured situations in Manhattan." These were classified according to personal frame of reference (whether the person spoke about himself, about himself and other people, or about other people only) and by topics, viz., economic, political, recreation, social, and place of conversation. Sex, age, and class differences were investigated and found "most apparent where reinforced by culturally assigned roles." Discussion of the little attention and interest devoted to public affairs is related by the authors to interpretation of opinion poll results on public affairs' issues.—*J. C. Franklin.*

1761. Webb, Henry J. An eighteenth century semanticist. *Etc. Rev. gen. Semant.*, 1948, 6(1), 55-57.—This is an account of some of the writings of an anonymous eighteenth century writer who might be considered one of the forerunners of the present day general semanticist. This writer recognized the value of language but he also realized that it brought several inconveniences. The significance of this early point of view is indicated.—*H. R. Myklebust.*

[See also abstracts 1630, 1631, 1678, 1697, 1898.]

CLINICAL PSYCHOLOGY, GUIDANCE, COUNSELING

1762. Bell, Bernard I. (U. Chicago, Ill.) Pastoral counseling of university scholars. *J. Pastoral Care*, 1948, 2, 1-5.—While much has been written on counseling students, little has been said about counseling university scholars engaged in teaching and research. Scholars are distressed by such pressures as (1) inadequacy of the human mind, inability to make sense of the totality of things, (2) aloneness and separation, an unsatisfied desire to love, and (3) moral disappointment in himself and the human race, that with all our knowledge we do not make better use of atomic and other energies for good instead of evil ends. There is need in university centers for mature counselors, well versed in academic experience, preferably not psychiatrists or officials of the university, charging no fees, respecters of confidences, good neighbors, related or not related to a religious body, patient men, not in a hurry or interested in statistics, who will be competent to listen with understanding to scholars in search of peace.—*P. E. Johnson.*

1763. Hutt, Max L. (Teachers Coll., Columbia U., New York.) What did the clinical psychologist learn from the war? *Ann. N. Y. Acad. Sci.*, 1948, 49, 907-912.—The effects of the past war on clinical psychology are summed up as follows: an extension of the boundaries of clinical psychology, the deepening of experience with tests as diagnostic instruments and with psychotherapy, the adaptation of

clinical techniques to meet diverse problems, and the improvement of knowledge concerning the theory of mental illness. The effects of the catalysis provided by the last war will be evident for many years to come.—*S. Ross.*

1764. Moreno, J. L. (Sociometric Institute, New York.) Psychodrama of a marriage. *Societry*, 1948, 2, 121-169.—Protocols are given of a series of psychodramatic sessions with a young man trying to work out a relationship with his wife and a second woman. Both of these actually took part in sessions.—*R. B. Ammons.*

1765. [Moreno, J. L.] (Sociometric Institute, New York.) Psychodrama of a pre-marital couple. *Societry*, 1948, 2, 103-120.—By acting out pre-marital and marital situations, couples can achieve a better understanding of their problems. An extensive protocol of a psychodramatic session of this kind with a girl considering marriage is given. Comments are made on direction and analysis.—*R. B. Ammons.*

1766. Wiesbauer, Henry H. (Cathedral of St. Paul, Boston, Mass.) Pastoral counseling. *J. Pastoral Care*, 1948, 2, 23-28.—Six cases are presented to indicate the work of pastoral counseling, and the value of referral among pastors and social agencies. The function of pastoral counseling is not a therapeutic imperialism to hold exclusive right to counsel with churchly ministrations. Neither is it a pseudo-psychiatry to duplicate the non-religious therapies so well performed by specialists in other healing professions. The pastor has a unique function in his counseling to unite the science of healing with the art of religious ministry.—*P. E. Johnson.*

1767. Wiggam, Albert Edward. *New techniques of happiness*. New York: Wilfred Funk, Inc., 1948. xi, 352 p. \$3.75.—"Every normal person wants to get out of life every bit of satisfaction and happiness that can be had—in his married life, his social contacts, his business or professional connections. That is what this book does—makes available to the reader techniques that he can use right now—today—to make his life more completely satisfactory." Tests of various kinds are included, annotated with original source references and presented in such form as to enable the reader to utilize the results toward his own adjustment. The author reports research of scientists and translates these studies for the "man in the street."—*L. R. Steiner.*

[See also abstracts 1577, 1579, 1945.]

METHODOLOGY, TECHNIQUES

1768. Allen, Robert M. (U. Miami, Fla.) A simple method of validating color and shading shock. *J. consult. Psychol.*, 1948, 12, 360.—To check on the usual procedure for determining color and shading shock the writer totals the full card response times for the color cards eliciting responses and divides this sum by the total number of responses given by the subject for all of the color

cards. The resulting quotient is the average time consumed by the subject for giving a response for the color cards. The same computations are made for the noncolor cards.—*S. G. Dulsky*.

1769. Boisen, Anton T. (*Elgin (Ill.) State Hosp.*) The minister as counselor. *J. Pastoral Care*, 1948, 2, 13-22.—Counseling is the non-medical equivalent of "psychotherapy," the use of recognized techniques to help the sick or troubled person. The minister of religion is always concerned with problems relating to mental health, for the church disturbs men's consciences and awakens its people to higher levels of adjustment. The church provides group therapy to heal guilt and isolation, to set men free to strive for goals in company with others. The aim of the church is to save souls, and religious conversion, like psychosis, is an earnest attempt to solve an inner conflict. But the church has offered treatment without diagnosis, as shown in a case study presented in this article. The minister needs clinical training not merely to learn techniques of counseling, but even more to understand the dynamics of personality. He must apply the methods of science to the field of religious experience.—*P. E. Johnson*.

1770. Elkisch, Paula. The "Scribbling Game"—a projective method. *Nerv. Child*, 1948, 7, 247-256.—The use of free scribbling is described as a projective method. First used as a therapeutic tool, some suggestions are made for its possible use as a diagnostic instrument.—*G. S. Speer*.

1771. Frank, Lawrence K. (*Zachry Institute, New York*) Projective methods. Springfield, Ill.: C. C. Thomas, 1948. vii, 86 p. \$2.75.—The rationale of projective methods is presented in this volume. A "psychocultural" approach to the emergence of personality and its dynamic action is stressed. Psychology can benefit from modern developments in other sciences, particularly, the emphasis on process rather than on the precise measurement of spatial and temporal dimensions. Various approaches to personality are discussed and projective methods are organized into five kinds. These are constitutive, constructive, interpretive, cathartic, and refractive methods. The final chapter deals with the general concepts of reliability and validity as applied to projective methods. The appendix includes an extensive bibliography of projective techniques.—*J. B. Rotter*.

1772. Gasca Diez, Maria. (*Inst. Vocational Orientation, Rome, Italy*) Esami collettivi della motricità. (Group examinations of motricity.) *Riv. Psicol.*, 1947, 43, 172-181.—Oseretzky prepared a "metrical scale" in analogy to that of Binet-Simon but for the purpose of measuring in children innate motor capacity. The major defect of the scale appears to be that it consists for the major part of tests of acquired rather than innate capacity and that it does not present in the application sufficient graduated difficulty for the respective age-groups. The Oseretzky test was originally designed for individual administration. Juarros (see 14: 1302) readapted it for group testing. The present author

using the Oseretzky (Juarros modification) on Italian pupils of primary school reports the results and her own opinion that these tests do not give exact indications of motorial age on Italian pupils at least. However, she believes these tests might be useful for manual work training.—*F. C. Sumner*.

1773. Kendall, Barbara S., & Graham, Frances K. (*Washington U. Sch. Med., St. Louis, Mo.*) Further standardization of the Memory-for-Designs Test on children and adults. *J. consult. Psychol.*, 1948, 12, 349-354.—Further standardization data on this test are presented. Test-retest data on 55 cases give a reliability index of .80. Split-half reliability is .92. Regression weights for age and intelligence have been used to obtain predicted scores.—*S. G. Dulsky*.

1774. Klugman, Samuel F. (*V.A., Philadelphia, Pa.*) The effect of placement of the Digits test in the Wechsler-Bellevue Intelligence Scale. *J. consult. Psychol.*, 1948, 12, 345-348.—The digits test was administered at the beginning, in the middle, and at the end of the W-B scale to 300 white, native-born psychoneurotic returnees. When digits were administered in the middle of the battery, the highest mean scores were obtained; when administered at the beginning, somewhat lower mean scores were obtained; when administered at the end of the scale, the lowest mean scores were found. Digits forward and backward were affected similarly. 16 references.—*S. G. Dulsky*.

1775. Miner, Genevieve F. (*Family Serv. Soc., Akron, O.*) Techniques of mutual evaluation. *J. soc. Casewk.*, 1948, 29, 400-403.—The use of an outline created primarily for joint analysis by a supervisor and supervisee has proved effective in evaluating the work of the supervisee. The advantages and limitations of this mutual process are discussed.—*V. M. Stark*.

1776. Sarason, Seymour B. (*Yale U., New Haven, Conn.*) The TAT and subjective interpretation. *J. consult. Psychol.*, 1948, 12, 285-299.—The fact that a psychologist, in the role of thematic interpreter or therapist, may reach valid conclusions, the sources of which are obscure to him, is not explained by a word like intuition, if by that word one refers to an unanalyzable process. The operations of the psychologist, overt or inferred, are as fit areas of investigation as those of the laboratory subject. The psychologist is part of the field which he is endeavoring to understand. A case is presented which concretizes the interpretive procedure.—*S. G. Dulsky*.

1777. Shaw, Barrie. (*U. Kentucky, Lexington*) "Sex populars" in the Rorschach test. *J. abnorm. soc. Psychol.*, 1948, 43, 466-470.—50 college men were tested individually for their ability to locate Beck's popular percepts on the Rorschach ink blots. At least three-fourths of the men correctly located 17 of the 20 populars. The second task was to indicate all percepts pertaining to sex organs or sex acts. 60% of the percepts were female, although

card VI produced mainly male percepts. 13 sex-popular areas are designated for use in "testing the limits."—C. M. Harsh.

1778. Sullivan, Anne, & Bondy, Curt. (*College of William and Mary, Richmond, Va.*) *Psychologische Teste in den Vereinigten Staaten von Amerika.* (Psychological tests in the United States of America.) *Sammlung*, 1948, 3, 408-424.—This article is an attempt to present to the German psychologists, psychiatrists and educators a brief description of some of the most important and popular American tests, together with American modifications of European tests. As representative of individual approaches to intelligence the authors presented the Stanford Revision of the Binet and the Wechsler-Bellevue Intelligence Scale; for achievement and scholastic aptitude, the Psychological Examination of the American Council of Education; as representatives of mechanical and musical aptitudes the Purdue Pegboard and the Seashore Measures of Musical Talents; the Strong and the Kuder for interests. In the personality realm of testing a brief review of the Bernreuter as a pencil and paper test, and the Rorschach, the Thematic Apperception Test, and Buck's House-Tree-Person as projective devices are discussed.—C. Bondy.

1779. Thurstone, L. L. (*U. Chicago, Ill.*) *The Rorschach in psychological science.* *J. abnorm. soc. Psychol.*, 1948, 43, 471-475.—Although the Rorschach test now has the spotlight of popularity enjoyed previously by the Binet tests, there is less attempt to integrate it with concepts of experimental and theoretical psychology. Its isolation is prolonged by a cultish jargon which tends to obscure the fact that many other test procedures can reveal the same characteristics. There is need for experimental study of mechanisms underlying Rorschach responses. Many variations of unstructured tests must be tried before we can hope to discover the most dependable measures.—C. M. Harsh.

1780. Welsh, George S. (*U. Minnesota, Minneapolis.*) *An extension of Hathaway's MMPI profile coding system.* *J. consult. Psychol.*, 1948, 12, 343-344.—By means of this code all MMPI profiles with scores lying between 99 and 20 can always be reconstructed on the basis of the code alone to an accuracy of 5 points for any scale. Ordinarily the accuracy will be within 2 or 3 points.—S. G. Dulsky.

[See also abstracts 1550, 1551, 1639, 1682, 1901, 1902.]

DIAGNOSIS & EVALUATION

1781. Christenson, James A., Jr., & Johnson, Lawrence C. (*V.A. Mental Hygiene Clinic, Tampa, Fla.*) *Indications for use of the Rorschach in mental hygiene clinics.* *J. abnorm. soc. Psychol.*, 1948, 43, 550.—It is stated that the Rorschach test is most effective for differential diagnosis of ten types of clinical cases whose nature is not obvious from an interview.—C. M. Harsh.

1782. Hunt, Howard F., Carp, Abraham, Cass, William A. Jr., Winder, C. L., & Kantor, Robert E. (*Stanford U. Calif.*) *A study of the differential diagnostic efficiency of the Minnesota Multiphasic Personality Inventory.* *J. consult. Psychol.*, 1948, 12, 331-336.—The present experiment was designed both to study the efficiency of some standard MMPI profile signs in differentiating between psychotic and non-psychotic adults, male psychiatric patients, and to investigate the degree to which the new K correction improves the performance of the test in this regard. It is concluded that (1) blind MMPI profile diagnosis based on the signs employed in this study does not appear to be satisfactory; (2) the K correction failed to improve significantly the accuracy of these diagnostic signs; (3) the K correction failed to reduce significantly the frequency of "false negative" profiles.—S. G. Dulsky.

1783. Lasaga, Jose I., & Martinez-Arango, Carlos. (*F No. 155 Vedado, Habana, Cuba.*) *Four detailed examples of how mental conflicts of psychoneurotic and psychotic patients may be discovered by means of the TAT.* *J. Psychol.*, 1948, 26, 299-345.—Six hypotheses were deduced in previous investigations on the stories a psychotic or psychoneurotic makes up from the TAT pictures. In this report, with case studies, cases of (1) professional difficulties and jealousy of wife, (2) impotence of husband, (3) religious vocation with family difficulties, and (4) homosexual worries were reported. Diagnoses seemed substantiated by the treatment curing or alleviating each of the cases.—R. W. Husband.

1784. Porta, Virginia. *Moderne tendenze della caratterologia.* (Modern tendencies of characterology.) *Riv. Psicol.*, 1947, 43, 187-192.—This is a report on a course held Sept. 1 to 6, 1947 at Lausanne and devoted to character-diagnosis in the psycho-technical examination and sponsored by the *Société Suisse de Psychologie et de Psychologie appliquée*. The enrolled were of varied nationality and of varied occupation. Numerous lectures were given on projective techniques such as the Rorschach, Murray's T. A. T., graphology, Szgondy's physiognomical test, Arthus' "village test" requiring the subject to construct a village from the various unassembled parts, and questionnaires of the Woodworth and Pressey type. The general impression from the course was that characterology has divorced itself from philosophical speculation and has blazed a trail of its own within the domain of pure and applied psychology.—F. C. Sumner.

1785. Schmidt, Hermann O. (*Norwich (Mass.) State Hosp.*) *Notes on the Minnesota Multiphasic Personality Inventory: the K-factor.* *J. consult. Psychol.*, 1948, 12, 337-342.—Results indicate that the L scale is as good an indicator of falsification as K; even though falsification occurs, the basic shape of a profile remains essentially the same, only its height diminishes; the K-factor contributes little if anything to differential diagnosis.—S. G. Dulsky.

1786. Wallen, Richard. (*Western Reserve U., Cleveland, O.*) *Food aversions in behavior dis-*

orders. *J. consult. Psychol.*, 1948, 12, 310-312.—A short (20 item) food aversion check list was administered to 227 Marine recruits who were later discharged on psychiatric grounds. 789 randomly selected recruits also filled out the list. Discharged men marked a significantly greater number of aversions than did the random group. It is suggested that this list may be used as a rapid screening device.—*S. G. Dulsky*.

1787. Zuckerman, Stanley B. (*Domestic Relations Court, New York.*) A research suggestion in large-scale Rorschach. *J. consult. Psychol.*, 1948, 12, 300-302.—The writer adapted the multiple-choice version of the Rorschach for large-scale use while retaining features of individual interpretation. This new technique is intermediate between that of a delicate diagnostic device and a rough screening tool. A preliminary digest of method and rationale is presented.—*S. G. Dulsky*.

TREATMENT METHODS

1788. Combs, Arthur W. (*Syracuse U., Syracuse, N. Y.*) Some dynamic aspects of non-directive therapy. *Ann. N. Y. Acad. Sci.*, 1948, 49, 878-888.—The purpose of the paper is to briefly discuss some current approaches to theory and practice in non-directive therapy. The following topics are treated: the operation of need in therapy, elimination of threat, aiding differentiation, the reorganization of self in therapy, and the client-centered nature of non-directive therapy.—*S. Ross*.

1789. Durkin, Helen E. The theory and practice of group psychotherapy. *Ann. N. Y. Acad. Sci.*, 1948, 49, 889-901.—The relationship therapy of John Levy as applied to groups is described as a direct, interpretative, transference therapy, which is psychoanalytically oriented. Several applications are presented.—*S. Ross*.

1790. Fantel, Ernest. (*Brentwood Hosp., Los Angeles, Calif.*) Psychodrama in a veteran's hospital. *Societry*, 1948, 2, 47-64.—Psychodrama was used in working with a group of men whose difficulties were associated with disappointment by wives or fiancées. Each session was concerned with the problem of one patient, while others listened or served as auxiliary egos. Wherever possible, wives and members of families were brought into the sessions. Protocols of scenes are given for 4 patients and for a group discussion.—*R. B. Ammons*.

1791. Freud, Sigmund. The question of lay analysis; an introduction to psychoanalysis. London: Imago Pub. Co., 1947. v, 81 p. 9/-.—In answer to an hypothetical impartial lay inquirer, Freud sets forth briefly the main discoveries of psychoanalysis and concludes "that every case where an analysis may be required shall first be diagnosed by a physician. . . . Once this has been established by the physician, we may safely leave the analytical treatment to the lay analyst." If in the course of treatment, "symptoms—usually physical symptoms

—appear, which the analyst may be doubtful whether to regard as originating entirely from the neurosis, or caused by an organic disturbance arising independently of it . . ." this must be decided by an outside physician, whether the analyst be a lay analyst or a medical analyst.—*D. Prager*.

1792. Grinker, Roy R. (*Michael Reese Hosp., Chicago, Ill.*) Semantics in psychiatry. *Etc. Rev. gen. Semant.*, 1948, 6, 39-54.—The author takes exception to the point of view expressed by Korzybski and Johnson (see 20: 3741). He says that the method of Johnson and Korzybski will not work in therapy because they have overestimated the rational, intellectual, reality-testing aspects of human beings and overlooked the irrational aspects. "Semantic errors are usually corrected by life experiences, providing they are not highly charged with emotional meaning and repressed." The author concludes that general semantics has an impossible goal in the prevention and therapy of human maladjustment because it does not consider the inner motivations, biological drives, and the dynamic unconscious. Dr. R. Meyers, in response to Dr. Grinker, makes a statement of what general semantics purports to achieve. The general semanticist is not primarily concerned with the meaning of words. Rather he is concerned with the relationship between language and non-verbal experiences. General semantics is not attempting to displace existent schools of psychotherapy. It purports to have fashioned a methodology by which all disciplines may, in a common effort, bring about a more acceptable world.—*H. R. Myklebust*.

1793. Harding, Gösta. (*Institut Medico-Pédagogique, Stockholm, Sweden.*) Quelques réflexions concernant le rôle de la psychanalyse dans le traitement des névroses (spécialement dans le cas des névroses d'obsession). (Some reflections concerning the role of psychoanalysis in the treatment of the neuroses, especially in the case of obsessional neuroses). *Acta Psychiat., Kbh.*, 1947, Suppl. 46, 121-131.—The objections of certain Scandinavian authors to psychoanalysis are considered. A distinction is made between psychoanalytic theory and psychoanalytic technique and a defense of psychoanalytic technique as an investigative technique which has yielded facts essential for successful therapy is offered.—*A. L. Benton*.

1794. Luchins, Abraham S. (*Ray Clinic, New York (N. Y.) Regional Office, V.A.*) Specialized audio-aids in a group psychotherapy program for psychotics. *J. consult. Psychol.*, 1948, 12, 313-320.—In conducting a group psychotherapy program the writer developed and utilized certain specialized audio-aids based on the everyday adjustment problems of the numbers of the group. Most of the audio-aids were recordings of apparent therapeutic sessions in which the roles of the "patient" and "therapist" were enacted by clinical personnel, while the problems and the general trend of the dialogue were based on experiences of patients in the group. The records stimulated the patients to recognize,

discuss, and attempt to solve his own or a fellow-patient's problems.—*S. G. Dulsky.*

1795. Mallinson, W. P. (*St. George's Hosp., London, Eng.*) Out-patient electric convulsion treatment. *Brit. med. J.*, 1948, 1, 641-645.—An out-patient clinic for treatment of mental patients, mainly depressive, was initiated at St. George's Hospital in Nov., 1941. 170 out-patient cases (103 women and 67 men) during a 12-month period (Sept., 1946 to Aug., 1947) who were subjected to electric convulsion treatment and 85 respondents to a questionnaire of 150 out-patient cases treated in the earlier years (2, 3, 4 or even more years before the above mentioned period) form the material on which this report is based as to the outcome of such treatment. Tables are given of the results in both groups. 61% of those answering the follow-up questionnaire reported recovery while in the case of the 170 cases treated during the 12 month period 57% of the men and 53% of the women were classified as recovered or much improved. For increasing the percentage of successes with out-patient electric convulsion treatment cases must be rigorously selected from the psychiatric as well as physical standpoint and certain social factors surrounding the patient must be taken into consideration such as having a relative or friend to escort patient home after treatment, the necessity of patient not living entirely alone and not living too far away from clinic. Patients doing intellectual work have more difficulty in carrying on during period of treatment owing to temporary memory defects.—*F. C. Sumner.*

1796. Moreno, J. L. (*Psychodramatic Inst., New York.*) Psychodrama and group psychotherapy. *Ann. N. Y. Acad. Sci.*, 1948, 49, 902-903.—The writer discusses 3 significant revolutions in the field of psychotherapy: hypnosis, psychoanalysis, and psychodrama. . . . Each of these revolutions was characterized by a specific change of operation, gradually compelling an overhauling of theory.—*S. Ross.*

1797. Moreno, J. L. (*Sociometric Institute, New York.*) Sociology and sociodrama. *Societry*, 1948, 2, 67-68.—Sociodrama can be utilized in work on social problems. Four steps are followed: warming up, planning for social catharsis or social learning, production, and social analysis of a completed unit of production. The analysis may give cues to the next production unit.—*R. B. Ammons.*

1798. Renouvier, Pierre. Group psychotherapy in the United States. *Societry*, 1948, 2, 75-83.—A brief review is given of the development of group psychotherapy. Group work helps the individual and the group and is a more real situation than that in individual psychotherapy. Moreno's main principles of group psychotherapy are listed and briefly commented upon.—*R. B. Ammons.*

1799. Thorne, Frederick C. (*U. Vermont, Burlington.*) Theoretical foundations of directive psychotherapy. *Ann. N. Y. Acad. Sci.*, 1948, 49, 869-877.—The writer presents first a description of

clinical psychology in the pre-war period. The next major discussion covers the nature of clinical science. The discussion is closed with a consideration of the therapeutic problems. 20 references.—*S. Ross.*

1800. Tillich, Mutie. My experience on the psychodrama stage. *Societry*, 1948, 2, 65-66.—A girl describes her experiences during and after a psychodramatic session, with special reference to her central problem.—*R. B. Ammons.*

1801. Ziskind, Louis. (*Jewish Comm. for Pers. Serv., Los Angeles, Calif.*) The caseworker's relation to shock therapy. *J. soc. Casewk.*, 1948, 29, 389-394.—A picture of the shock therapies is presented. The following types are listed: (1) insulin, (2) metrazol, and (3) electric. The author discusses the prognostic factors, mechanism of treatment, relationship to psychotherapy, and untoward effects of treatment. The caseworker's role in the successful application of shock therapies includes interpretation and dissemination of information, direction of cases for early treatment, supervision of discharged patients, and participation in research studies.—*V. M. Stark.*

[See also abstracts 1531, 1758.]

CHILD GUIDANCE

1802. Angus, Leslie R. (*Devereux Schools, Devon, Pa.*) Schizophrenia and schizoid conditions in students in a special school. *Amer. J. ment. Def.*, 1948, 53, 227-238.—The difficulties of diagnosing childhood schizophrenia are discussed, as well as the problems encountered in treating cases where the disease has been definitely discovered. However, the author points out that even though it seems to be true that the prognosis of the psychotic child, once the process is clearly established, is very poor, if potentially psychotic symptoms are recognized early there seems to be at least a reasonable chance of saving the child. There is a great deal more to be learned about such early conditions and much that can be learned in special schools if time is devoted to this problem.—*V. M. Staudt.*

1803. Bloomberg, Claire M. (*Green Acres School, Bethesda, Md.*) An experiment in play therapy. *Childh. Educ.*, 1948, 25, 177-180.—Two groups of 5 children each were selected on the basis of poor adjustment, and met 1 hour a week during the school year in a group play therapy situation. Toys, etc., were provided and a permissive atmosphere maintained. Results are illustrated by means of a case history.—*G. H. Johnson.*

1804. Conn, Jacob H. The play-interview as an investigative and therapeutic procedure. *Nerv. Child*, 1948, 7, 257-286.—The use of planned-play situations as a therapeutic procedure is described through the presentation of detailed clinical reports. It is felt that the play-situation allows the child to participate actively in the discussion of his own problems, and to express his feelings, as an impartial and objective observer.—*G. S. Speer.*

1805. Despert, J. Louise. (*Cornell U. Med. Center, New York.*) **Play therapy; remarks on some of its aspects.** *Nerv. Child*, 1948, 7, 287-295.—This is a discussion of some practical considerations in introducing the child to the therapeutic situation, and in using the first interview as a basis for therapeutic planning. Any given moment of behavior contains and reflects the child's total life experience. The fluidity of expression and the diversity of patterns presented make for complexity, but also increase the possibilities of interpretation.—G. S. Speer.

1806. Gillies, Emily P. **Therapy dramatics for the public school-room.** *Nerv. Child*, 1948, 7, 328-336.—An average class of first grade children in an average middle-class community dramatize the work their fathers do. It is felt that the dramatizations have helped to release tensions in the group, and to create more healthy attitudes in these children.—G. S. Speer.

1807. Glatzer, Henriette T. **A study of play therapy with an eleven year old boy suffering from severe castration fears.** *Nerv. Child*, 1948, 7, 304-310.—Play therapy allowed the acting-out of castration fears, the expression of unconscious conflicts, and the strengthening of the ego. Feelings of anxiety and guilt were markedly lessened, and he was able to use his energies effectively.—G. S. Speer.

1808. Harms, Ernest. **Children's play and abnormal behavior.** *Nerv. Child*, 1948, 7, 229-232.—American studies of play and play therapy have been primarily concerned with psychoanalytic theory, and have ignored the scientific studies and theoretical contributions of European scholars of the last two centuries. These studies are briefly cited.—G. S. Speer.

1809. Harms, Ernest. **Play diagnosis; preliminary considerations for a sound approach.** *Nerv. Child*, 1948, 7, 233-246.—A serious attempt to create a systematic basis for play-diagnosis must include an understanding of the specific character and interrelationships of: (1) the psychology of the child; (2) the philosophy and psychology of play; and (3) mental illnesses of childhood. It is felt that at present so little is known of any of these that play diagnosis yields meager results.—G. S. Speer.

1810. Kunst, Mary S. (*Illinois Children's Home and Aid Society, Chicago.*) **A study of thumb-and finger-sucking in infants.** *Psychol. Monogr.*, 1948, No. 3, vi, 69 p.—A study of the thumb- and finger-sucking habits of 143 infants in one orphanage with particular reference to feeding and non-feeding variables. Among the principal findings reported by Kunst are: (1) "Sucking frequency increased as time elapsed after feeding, whether the infants were asleep or awake." The increase is marked 1.5 to 2 hours after meals; (2) Sucking correlated positively with liquid volume of formula when age and weight are held constant; (3) Negative correlation between sucking and caloric value of formula when volume of formula, age, weight and sex are controlled; (4)

Evaporated milk appears to delay hunger and reduce tendency to develop sucking more than boiled milk, enzyme, or acidified milk formula; (5) Thumb- and finger-sucking begins soon after birth, increases quite rapidly in first 3 months of post-natal life, followed by a 3 months plateau and then a decline to the 10th month, followed by a secondary rise to the end of the year; (6) Sex differences were noted with boys showing greater frequency of thumb-sucking than girls. This may be related to sex differences in metabolism as well as weight; (7) Teething infants appear to have greater sucking frequency than non-teething infants but differences are slight; (8) Other factors affecting the sucking habit appear to be the amount of activity and play of the infant, position as it influences stomach motility, presence of observers and attendants. 53-item bibliography.—M. A. Seidenfeld.

1811. Miller, Helen E. **Play therapy for the institutional child.** *Nerv. Child*, 1948, 7, 311-317.—By demonstrating that someone is able and willing to meet the demands and needs of the child, "play therapy may prove helpful to a child in an environment deprived in crucial areas of those elements regarded as essential to the normal development of a child in our culture."—G. S. Speer.

1812. Milligan, W. Liddell. (*St. James Hosp., Portsmouth, Eng.*) **Juvenile general paralysis; a case with a spontaneous but short-lived remission.** *Brit. med. J.*, 1948, 1, 881-882.—The literature on juvenile general paralysis is briefly reviewed as to incidence (figures varying from 1.7% to less than 1%); as to sex distribution (reports varying from equal sex distribution to slight tendency for males to predominate); as to age incidence (the majority being between 10 and 15 years of age or 36.2% according to Menninger). A case of juvenile general paralysis in a boy who exhibited a number of behavior problems aged 11 years and 3 months is reported. In discussing the case the author stresses the need for a careful physical examination of all children seen at child guidance clinics.—F. C. Sumner.

1813. Moreno, J. L. (*Sociometric Institute, New York.*) **Psychodrama of an adolescent.** *Societry*, 1948, 2, 7-26.—The protocol of the first psychodramatic session with a 14-year-old boy is given. Background information indicated that he came from a good family, but had shown many behavior disturbances. The technique and problems of a first session in psychodrama are discussed.—R. B. Ammons.

1814. Schwartz, Abraham B., & Harbeck, Irene. (*Marquette U. Med. Sch., Milwaukee, Wis.*) **The school's part in the therapy of a fear obsession in a four year old child.** *Nerv. Child*, 1948, 7, 301-303.—In dealing with problems in the field of behavior, the pediatrician must cooperate with all other persons concerned with that behavior. The point is illustrated by a case history in which the pediatrician and the teacher successfully cooperate in the treatment of an obsessive fear.—G. S. Speer.

1815. Slavson, S. R. **Play group therapy for young children.** *Nerv. Child*, 1948, 7, 318-327.—The absence of super-ego formation, low degree of guilt, weak ego structure, and basic narcissism in the very young child make it necessary that acting out be limited, restrained, and directed, and that the therapist call attention to the latent meaning of behavior. The advantages of group play therapy are the catalytic effect each patient has upon the other, and the tendency to reduce repetition.—G. S. Speer.

1816. Solomon, Joseph C. **Play technique as a differential therapeutic medium.** *Nerv. Child*, 1948, 7, 296-300.—This is a brief discussion of the use of active versus passive methods of play; the use of doll play in the relationship between child and therapist; and the modification of technique to suit the symptom picture of the child at the beginning of therapy.—G. S. Speer.

[See also abstracts 1854, 1894, 1954.]

VOCATIONAL GUIDANCE

1817. New York (State). Department of Labor. (Albany, N. Y.) **Employment counseling.** *Res. Libr. Ext. Serv., Libr. Bull.*, 1948, No. 5. 9 p. Mimeo.—This is a selected list of book and journal references for the use of counselors which includes entries on counseling methods, interviewing, training of counselors, and counseling with such groups as the handicapped, veterans, and youth.—C. M. Louitt.

1818. Seeman, Julius. (U. Chicago, Ill.) **A study of preliminary interview methods in vocational counseling.** *J. consult. Psychol.*, 1948, 12, 321-330.—The purpose of this study was to describe methods used by counselors in the preliminary interview in vocational counseling. The analysis of these methods was based upon 36 recorded interviews, representing 6 interviews for each of 6 counselors. 9 counselor response categories were derived. Further research programs are outlined.—S. G. Dulsky.

1819. Van Allyn, Keith. **A technique for the selection, training and counseling of personnel.** Palo Alto, Calif.: Surveys Inc., 1948. x, 117 p.—A booklet describing the purposes, construction, application, and interpretation of the author's Qualification Inventory which is used to measure an individual's interest, activity, training or education, ambition, work experience, and achievement in each of 35 vocational elements considered basic to all jobs.—P. S. de Q. Cabot.

BEHAVIOR DEVIATIONS

1820. Deutsch, Albert. **The shame of the states.** New York: Harcourt, Brace, 1948. 188 p. \$3.00.—This is a popular account of conditions in public mental hospitals in this country by a lay champion of the plight of the mentally ill. By means of photographs taken in mental hospitals, the author

indicts society for its maltreatment of human beings. Comments are made concerning various efforts being directed toward alleviation of conditions, and brief specifications for an ideal mental hospital are included. Introduction by Karl Menninger.—A. J. Sprow.

1821. Elonen, Anna S., & Korner, Anneliese Friedsam. (U. Chicago Clinics, Ill.) **Pre-and post-operative psychological observations on a case of frontal lobectomy.** *J. abnorm. soc. Psychol.*, 1948, 43, 532-543.—A 52-year-old man complaining of dizziness, confusion, and memory loss was tested 4 days before and after the operation for a frontal tumor, and again 14 months later. Test performance in the 3 sessions is tabularly compared. Stanford-Binet IQ rose from 62 to 74 after the operation, and to 111 after 14 months. Kuhlmann IQ rose from 53 to 80. Verbal disintegration and aphasia disappeared in the second testing; reasoning and retention improved most markedly; but flexibility with unfamiliar material (as in the Kuhlmann) was impaired even after 14 months. The first Rorschach was rigidly perseverative, typical of severe organic cases. The second was profusely literal, varied, and euphoric, but of inferior quality. The third Rorschach showed increased productivity, versatility, and suppression of anxiety.—C. M. Harsh.

1822. Jung, C. G. **Symbolik des Geistes.** (Symbolism in mental activity.) Zurich: Rascher Verlag, 1948. xii, 500 p. 24 Swiss fr.—In attempts at adjustment to society and culture, the human being may resort to various methods of orientation, which may be considered "abnormal." The psychological and symbolic phenomena may be due to different moral standards and religious teachings in which the aims may be an integrated life, but which conditions in themselves are the causes of this maladjustment. Other factors which may also contribute to these conditions are body chemistry, malfunctioning of the endocrine and other glands. In these attempts at adjustments, the soul or "geist," as used by the author is very inclusive and involves the mind, inspiration, nature, emotions, temperament, religious beliefs, and the unconscious. Both astrology and metaphysics are discussed, the latter from the standpoint of teachings of the Old Testament; also the concepts of Satan, the theological ideas of the Trinity as held by the Greeks, Egyptians and Babylonians, and the meditations on Buddhism and other Oriental beliefs. Pleasure-seeking and guilt-feelings, due to the individual's departure from prescribed and demanded procedures of society, lead to methods of escape from reality, such as hysteria, amnesia, dual and multiple personality, and the like, all of which vary with the individual, but at the same time, there may be tendencies toward symbolic phenomena which are somewhat common for specific disturbances.—O. I. Jacobsen.

1823. Kalinowsky, Lothar B., & Scarff, John E. **The selection of psychiatric cases for prefrontal lobotomy.** *Amer. J. Psychiat.*, 1948, 105, 81-85.—Psychiatrists are asked more and more frequently if

prefrontal lobotomy would be effective in a given patient. Prefrontal lobotomy, if applied to the right type of patient is a valuable means of saving patients from mental illness. In this paper the authors emphasize that the selection of cases should be entirely in the hands of a psychiatrist with experience in various types of treatment. They indicate a number of points which may be helpful in the selection of cases for lobotomy. In future work, individual case reports should be encouraged after the statistical approach has served its purpose as a rough means of general orientation. Careful psychiatric diagnosis including evaluation of the patient's pre-morbid personality are prerequisites for a proper selection of cases. Long-range therapeutic planning is of primary importance since more therapeutic procedures are available. Integration of lobotomy with the other methods will definitely increase the number of successfully treated patients in psychiatry.—J. Barron.

1824. Keyes, Baldwin L., Bookhamer, Robert S., & Kaplan, Albert J. **Psychiatry in the general hospital.** *Amer. J. Psychiat.*, 1948, 105, 90-95.—The inclusion of a psychiatric ward service within the framework of the general hospital on a national scale is timely, practical, and economical. A review of psychiatric consultations at the Jefferson Hospital indicates that there is a wide variety of psychogenic illnesses that require more than a consultation service to treat effectively. Illustrative cases are cited as examples of types that may be treated adequately in the general hospital. It is suggested that hospitals modify existing facilities rather than wait for elaborate new structures, for inclusion of psychiatric ward services. Organizational and personnel requirements are briefly outlined. With the inclusion of psychiatric ward services in the general hospital, the outpatient services would become more effective and thus a step forward would be made toward better national mental hygiene. Discussion by Edward G. Billings, M.D. 10 references.—R. D. Weitz.

1825. Kretschmer, Ernst. **[Ed.] Psychiatry.** Wiesbaden, Germany: Office of Military Government for Germany, Field Information Agencies, Technical, British, French, U. S., 1948. 300 p. (Printed by Dieterich'sche Verlagsbuchhandlung, Wiesbaden.)—This is a contribution to the FIAT reviews of German science between 1939 and 1946. The psychiatric and psychological literature, mostly published within Germany after 1939, is reviewed by several different authors. The topics covered and their authors are: (W. Ederle) Psychic disturbances due to organic brain damage, Physical disorders and toxic disturbances, and Somatic therapy of the psychoses; (G. Mall) Serology and immunity reaction, Physiology of constitution, Psychology of constitution; (K. Conrad) Neurology of heredity; (J. Hirschmann) Medical psychology, Psychopathic personality and neuroses, Psychotherapy; (K. Ernst) Psychiatry of childhood and adolescence, Mental endowment and mental deficiency, Legal psychiatry and criminal biology and psychiatry; (A. Bingel) Psychiatry in

Air Force medicine. Bibliography in excess of 1000 titles divided by subject following each of the chapters.—H. L. Zimmer.

1826. Liebman, Joshua Loth. **[Ed.] Psychiatry and religion.** Boston: Beacon Press, 1948. xix, 202 p. \$3.00.—A report of the Institute on Religion and Psychiatry held in October, 1947 at Temple Israel, Boston, Massachusetts. Ten chapters present the efforts of 15 leaders to find common ground on which to improve the mental health of our generation. Seward Hiltner, Otis F. Kelly and Joshua L. Liebman explore where psychiatry and religion meet and part. Harry C. Solomon and Albert Deutsch evaluate the hospital care of the mentally ill. George Gardner, Martin A. Berezin, Lydia G. Dawes, and Paul E. Johnson consider the emotional needs of the child and the adolescent. F. Alexander Magoun, Joseph J. Michaels, Eric F. McKenzie, and Henry H. Wiesbauer assess the problems and resources of marriage. Henry H. Brewster and Suzanne T. Van Amerongen show the dynamics and management of the grief situation. There is a growing realization that psychiatry and religion are both working in the area of personal resources for achieving interpersonal values. For the best results, a creative partnership is needed.—P. E. Johnson.

1827. Maeder, A. **Selbsterhaltung und Selbsteilung; die Selbsttätigkeit der Seele.** (Self-guidance and self-direction.) Zurich: Rascher 1949. 332 p. 15 Swiss fr.—This is a presentation of methods whereby the individual who is maladjusted tends, through spontaneous means and self-therapy, to overcome abnormalities by proper adjustment. Freud's methods and attitudes are upheld and accepted throughout the discussion, but there is a wealth of references to all classifications of research workers throughout the world, and to their findings. Problems of loss of self-respect, neuroses, frigidity, and other abnormalities are explained with excellent examples presented. The influences of family relationships on personality structure, on loss of self-respect, on compensation, phantasies, inhibitions and the like, are presented, and the uses of hypnotism and suggestion, psychoanalysis, auto-regulation, etc., for effecting improvement are given. Primitive uses of medicine and psychotherapy are also included. The "soul's" spontaneous solution of emotional conflicts and frustrations is stressed throughout the book. In spite of environmental conditions, propaganda, economic systems, political influences, and many other factors, the inner self or soul tends to adjust spontaneously to conditions as they arise; however, previous experiences can have a marked influence on the type of adjustments made.—O. I. Jacobsen.

1828. Moodie, William. **(London Child Guidance Clinic, Eng.) The doctor and the difficult adult.** London: Cassell, 1947. vii, 296 p. 15s.—"This book is written for the ordinary doctor, who wishes more fully to understand the many peculiar persons he meets in his everyday practice, and, maybe, to treat some of them. It does not pretend to be a

scientific treatise on psychiatry. . . . Every patient seen by every doctor, whatever the reason, is a human being and, as such, has a mental constitution which determines his personal, individual, and unique response to illness or health." The scope of psychiatry, the psychoses, the psychoneuroses, epilepsy, mental and personality defects, the psychiatric interview, and general and psychological treatment are discussed. Numerous illustrative case studies are presented.—R. G. Kuhlen.

1829. Oberndorf, C. P. (*Columbia U., New York.*) *Which way out; stories based on the experience of a psychiatrist.* New York: International Universities Press, 1948. 236 p. \$3.25.—The aim of these 11 fictional episodes based on composites of problems which the author has found repetitive during his 40 years of psychiatric practice is to illustrate these problems in a popular, dramatic manner. The stories demonstrate the psychiatric approach to human interrelations and "the advances made in the field of psychiatric practice during the twentieth century" in non-technical language. An introduction serves to unify the group.—A. J. Sprow.

1830. Papez, James W. (*Cornell U., Ithaca, N. Y.*) *Inclusion bodies associated with destruction of nerve cells in scrub typhus, psychoses and multiple sclerosis.* *J. ment. Dis.*, 1948, 108, 431-434.—Two cases of scrub typhus, 2 cases of anterior poliomyelitis, 29 cortical biopsies from cases of dementia praecox, 15 cases of other chronic psychoses and 8 cases of multiple sclerosis yielded nervous tissues that showed cytoplasmic inclusions and pathological changes of nuclei. No inclusion bodies were found in nervous tissues taken from rats, dogs, guinea pigs, children, and allegedly normal adults.—N. H. Pronko.

1831. Stephanie, M. *Care of the mental patient in the general hospital.* *Hosp. Progr.*, 1947, 28, 359-362.—The evolution of psychiatry is briefly traced as an introduction to a description of the new psychiatric division of Loretto Hospital, Chicago, Ill., which incorporates the latest in the matter of safety for the patient, and the newer therapies.—F. C. Sumner.

1832. Whitaker, Carl A. (*Emory U., Atlanta, Ga.*) *Compensation for psychiatric disabilities in industry.* *Occup. Med.*, 1948, 5, 391-395.—Until recently psychiatric care has not been included in compensation for industrial accidents. In evaluation of psychiatric disability, a modification of the method used by United States Army medical officers is suggested: (1) the diagnosis, (2) the predisposition, (3) the precipitating stress, and (4) the functional incapacity. The psychiatrist's place in problems of industrial accidents is considered. "It is hoped that this contribution will stimulate further discussion from which will emerge a set of principles that will have general acceptance."—B. M. Eves.

1833. Wittman, Phyllis, & Sheldon, William. (*Elgin, Ill.*) *A proposed classification of psychotic behavior reactions.* *Amer. J. Psychiat.*, 1948, 105,

124-128.—There is a growing recognition of the inadequacies of our present psychiatric classification based on rigid "all or nothing" diagnostic labels. Classification has always been an indispensable aspect of the development of knowledge in every field. This paper describes a proposed classification of psychotic reactions into what appear to be the 3 fundamental types of behavior. These types are called (1) affective exaggeration, (2) paranoid projection, (3) heboid regression. These 3 components of psychotic behavior are described in terms of specific traits that for research studies can be checked on each patient used as subject. A tentative check list of psychotic behavior traits appears at the end of this report.—R. D. Weitz.

[See also abstracts 1569, 1690.]

MENTAL DEFICIENCY

1834. Bice, Harry V. (*New Jersey State Crippled Children Commission.*) *Certain recent theoretical observations and their practical application in a case of feeble-mindedness.* *Amer. J. ment. Def.*, 1948, 53, 338-344.—A complete case history of a mentally deficient girl is presented in an effort to show that the efforts of the physician, psychologist, educator, and administrator are all important in rehabilitating the individual and preparing her for her return to society. The author cautions any one professional group against feeling that its service is "fundamental."—V. M. Staudt.

1835. Boldt, Waldemar H. *Postnatal cerebral trauma as an etiological factor in mental deficiency.* *Amer. J. ment. Def.*, 1948, 53, 247-267.—One thousand consecutive records at a large New York State institution were investigated to find potential cases of postnatal cerebral trauma. 21 cases showed evidence of cerebral trauma adequate to cause mental symptoms and were completely worked up with history, psychological evaluation, and progress notes. 4 cases were discarded because of mental disease morbidity in parental lineage with the possibility of familial factors. 3 cases were incompletely worked up because of discharge before initiation of the study. Psychometric evaluation indicated 7 cases in which there had been a drop in IQ since admission, one case in which it remained static, and one in which it improved. Physical findings were mainly limited to one partial hemiplegia, one internal strabismus, 7 cases of speech defect, and 6 patients with scar evidence of cerebral trauma or palpable bony defect. Pneumoencephalography and electroencephalography were also done on several cases. The authors feel that this type of investigation is the most complete method of evaluating the possibility of mental deficiency as a result of cerebral trauma. They estimate that approximately 1.5% of institutionalized mental defectives can be considered to be the result of postnatal cerebral trauma. 62-item bibliography.—V. M. Staudt.

1836. Cotzin, Milton. (*Southbury Training Sch., Southbury, Conn.*) *Group psychotherapy with men-*

tally defective problem boys. *Amer. J. ment. Def.*, 1948, 53, 268-283.—Group psychotherapy was used with 9 boys whose chronological ages ranged from 11-6 to 14-11 and whose IQ's ranged from 50 to 79. The length of time each had been in residence at the Southbury Training School varied from 2 years, 1 month to 6 years, 1 month. Brief descriptions of each case are given as well as descriptions of the therapeutic sessions. The general results, according to the author, are entirely encouraging and they indicate the usefulness of the method with mental defectives. 22 references.—V. M. Staudt.

1837. Crutcher, Hester B. (New York State Dept. Mental Hygiene, Albany, N. Y.) Family care of mental defectives. *Amer. J. ment. Def.*, 1948, 53, 345-352.—The problems and the advantages of the family care program for mental defectives are discussed in detail. Special reference is made to the use of the program in New York State.—V. M. Staudt.

1838. DeProspero, Chris J., Rosenzweig, Louis E., & Shainman, Leo. (Bureau for Children with Retarded Mental Development, New York.) A follow-up program for the mentally retarded. *Amer. J. ment. Def.*, 1948, 53, 353-362.—The importance of recognizing individual differences in providing guidance, placement, and follow-up service for the mentally retarded is stressed. The possibilities of individualizing these procedures are demonstrated with specific reference to the program developed by the Bureau for Children with Retarded Mental Development in New York City.—V. M. Staudt.

1839. Doll, Edgar A. (The Training School, Vineland, N. J.) What is a moron? *J. abnorm. soc. Psychol.*, 1948, 43, 495-501.—Opinions concerning diagnosis and treatment of morons vary because of failure to distinguish intellectual from social defects. The distinction can be made objectively by using a variety of performance and verbal tests plus the Vineland Social Maturity Scale. Intellectual morons are handicapped mainly on verbal tests, whereas truly feeble-minded persons do poorly on all tests. Prognosis depends upon social ability and upon differentiation of endogenous and exogenous defects. 29-item bibliography.—C. M. Harsh.

1840. Goldstein, Irwin. (Bureau for Children with Retarded Mental Development, New York.) Implications of mental deficiency. *Amer. J. ment. Def.*, 1948, 53, 207-226.—The characteristics and variations of mental deficiency are discussed as well as its personal, social, and educational implications. An outline is also presented summarizing the facts of mental deficiency and some of the fiction surrounding mental defect. 64 references.—V. M. Staudt.

1841. Jervis, George A. (Letchworth Village, Thiells, N. Y.) Early senile dementia in mongoloid idiocy. *Amer. J. Psychiat.*, 1948, 105, 102-106.—In 3 mongoloid patients aged respectively 47, 42, and 37 years, personality changes and mental deterioration were observed. Pathologically, evidence of

senile changes was obtained consisting of degeneration of neurons, numerous senile plaques, and Alzheimer's neurofibrillary changes. With the exception of the age of onset, the clinical and pathological manifestations are those of senile dementia. Since mongoloid patients show a marked tendency to develop this type of reaction, it is suggested that the study of it offers some information which may contribute to a better understanding of the causes of senile dementia. Two microscopic plates are presented. 6 references.—R. D. Weitz.

1842. Levy, Sol, & Perry, H. A. (Eastern State Hosp., Medical Lake, Wash.) The role of maternal illness during pregnancy in the etiology of Mongolism. *Amer. J. ment. Def.*, 1948, 53, 284-293.—The role of intercurrent infectious diseases in the mother during pregnancy in the etiology of mongolism was investigated. The histories of 64 Mongolian children were studied and the findings compared with the histories of 83 other feeble-minded children. In addition to the analysis of the case histories, questionnaires were sent to the parents, relatives, and closest friends of all the children, requesting definite information in this respect. Results of this study clearly reveal that intercurrent infectious disease in the mother during pregnancy does not have any significance in the subsequent development of Mongolism, since the incidence of intercurrent infectious diseases was approximately the same in the Mongolian group as in the control group. Of real significance, the authors state, as far as the etiology of Mongolism is concerned, are the ages of the mothers and fathers, and the birth order of the Mongolian child, factors which have previously found rather widespread acceptance. In this study no significant deviations in the family history were found which could be considered as causative factors of Mongolism.—V. M. Staudt.

1843. Magnusson, J. Henning. (Sachs' Hosp. for Children, Stockholm, Sweden.) Toxoplasmic encephalitis in a child infected in utero. *Acta psychiat., Kbh.*, 1947, Suppl. 46, 193-203.—Case reports of mother and child, suffering from toxoplasmosis, an infective disease not previously diagnosed in Sweden. In the mother the disease was subclinical in character and the diagnosis was made by serologic test. The child showed gross mental deficiency and developmental anomalies. 18 references.—A. L. Benton.

1844. Mautner, Hans. (Wrentham (Mass.) State Sch.) Spina bifida occulta and spinal dysraphism in feeble-minded. *Amer. J. ment. Def.*, 1948, 53, 239-246.—12 cases are presented in which the author analyzed the pathological changes of the spinal cord. Among these feeble-minded individuals was found a large percentage of spina bifida occulta, spina bifida and many other pathological changes which have been attributed to malformations of the spinal cord, and spinal dysraphism. To the author it seems highly probable that many malformations are connected with abnormal nerve supply of the affected region. 18 references.—V. M. Staudt.

1845. Shaffer, Thomas E. (*Ohio State U., Columbus.*) **Medicine in a state program for mental deficiency.** *Amer. J. ment. Def.*, 1948, 53, 294-301.—A state program for Ohio which provides for a larger role for teaching and research and which includes services for institutions and communities is described. An attempt is made to show that a definite plan for inclusion of teaching and research functions in a program of services for mental defectives should result in an improved program and in the attraction of well-trained personnel into the field.—*V. M. Staudt.*

1846. Sloan, William. (*Lincoln State School, Ill.*) **Prediction of extramural adjustment of mental defectives by use of the Rorschach test.** *J. consult. Psychol.*, 1948, 12, 303-309.—Fifteen pairs of mental defectives who had been out on wage placement were used in this study. One member of each pair was returned for failure to adjust while the other member was still out at the time of this study. Quantitative statistical comparison failed to distinguish successful from unsuccessful wage placements on the basis of Rorschach factors. The value of the Rorschach method for the purpose of prediction for successful extramural adjustment was not demonstrated.—*S. G. Dulsky.*

1847. Stone, Marguerite M. (*Catholic U. Washington, D. C.*) **Parental attitudes to retardation.** *Amer. J. ment. Def.*, 1948, 53, 363-372.—The reactions of parents during interviews concerning diagnosis of mental retardation in their children were studied in 44 case records. The cases were classified according to their awareness of the problem when they applied and when the interpretation was made. There was evidence of growth during the diagnostic process in the ability of some of the parents to face the problem. This movement was shown by the changes in the numbers in the various groups. Factors in the individual family situations and in the culture were analyzed to discover possible relationships between these elements and the ability of the parent to learn the facts of his child's retardation. Evidence of much psychic pain was discovered in many of the interviews. In some cases the symbolic meaning of the defective child to each of his parents tended to isolate the parent from his fellows and to make him feel guilty. The retarded child was also found to be used negatively in problems of marital adjustment. The results of this study indicate that the case worker has to educate the parent to the reality of his child's handicap and at the same time help him handle the emotions aroused by the facts.—*V. M. Staudt.*

1848. Vevle, Mendus R. (*Owatonna (Minn.) State School.*) **A report on the organization of a school with a separate campus prepared to give training to mentally deficient boys and girls in anticipation of their return to normal community living.** *Amer. J. ment. Def.*, 1948, 53, 199-206.—This paper is a report on the development of this program in the State of Minnesota. The chief aim is to prepare high-grade mentally deficient children for

community living by giving them special training in a school of their own.—*V. M. Staudt.*

1849. Walker, Gale H. (*Polk (Pa.) State Sch.*) **Some psycho-sexual considerations of institutionalized mental defectives.** *Amer. J. ment. Def.*, 1948, 53, 312-317.—A review of the psycho-sexual development of the normal child is presented at first, and then the development of the mental defective is discussed. Development appears to be based more upon mental age than upon chronological age. In the development of the mentally deficient there is considerable confusion of symptoms. Specific psycho-sexual problems of the mentally deficient are described.—*V. M. Staudt.*

1850. Whitney, E. Arthur. (*Elwyn Training School, Pa.*) **A statistical study of children admitted and discharged from Elwyn.** *Amer. J. ment. Def.*, 1948, 53, 182-186.—During the past 18 years a total of 1220 children have been admitted to the Elwyn Training School and 1150 discharged. First a review of the records was made to determine the etiological factors involved. The records were also analyzed to discover how good an adjustment was made after the institution discharged the patient. An attempt was made to find the optimum physical age for successful adaptation in society after full training at the institution. Those patients who made the best adjustment after leaving the institution left Elwyn after the age of 27. From the facts garnered in this study it has become the institution's policy now not to recommend removal until at least the 22 to 27 year level, and the nearer to 27 the better will the prospects for the girl or boy become.—*V. M. Staudt.*

[See also abstracts 1939, 1941, 1947.]

BEHAVIOR PROBLEMS

1851. B'rakhyahu, M. Hamatsav hanafshi shel haole. (*The mental status of the Palestinian immigrant.*) *Higena ruhanit*, 1947/48, 5, 41-49.—We feel in all Palestinian immigrants coming nowadays from displaced-persons-camps that they have lost everything, though in various respects. In many of them we observe the process of regression into the childhood, which comes to expression in decreasing of the personal feeling of safety, leading even to despair and narcolepsy. Others, e.g. the "Exodus 1947" people, manifest hatred emotions. It is much easier to return them to normal life than the "desperate" ones.—*H. Ormian.*

1852. Coleman, James C. (*U. New Mexico, Albuquerque.*), & McCalley, Jean Elizabeth. **Nail-biting among college students.** *J. abnorm. soc. Psychol.*, 1948, 43, 517-525.—A questionnaire administered to more than 1,000 college students revealed that 52% of the men and 54% of the women had bitten nails at some time. 29% of the men and 19% of the women were still nail-biters. Social disapproval caused both sexes to give up the habit, but women were more influenced by the value of well-kept nails. Samples of 54 present biters and 54 who had never bitten nails were given the Bernreuter

Inventory and a personal data sheet concerning childhood security feelings. Female nail-biters scored significantly more introverted and neurotic on the Bernreuter and reported more current anxiety than non-biters. Male nail-biters also felt more anxiety than non-biters and often had experienced inconsistent discipline and lack of independence in childhood. 21-item bibliography.—C. M. Harsh.

1853. Fodor, Nandor. *Nightmares of water*. *Amer. Imago*, 1948, 5, 140-151.—Many nightmare dreams of water appear to recapitulate the birth of the dreamer. Insight into the birth trauma "has completely relieved or greatly benefitted many patients whose symptoms were resistant to interpretations on the Oedipus or other childhood levels." Examples are given.—W. A. Varvel.

1854. Pearson, Gerald H. J. (*Temple U., Philadelphia, Pa.*) *The psychology of finger-sucking, tongue-sucking, and other oral "habits"*. *Amer. J. Orthod. oral Surg.*, 1948, 34(7), 589-598.—Finger-sucking is a natural method of obtaining instinctual gratification not of hunger but of sex in young children. If this method of obtaining instinctual gratification is stopped too abruptly or too severely, a neurotic symptom like stuttering or a personality change to antisocial behavior may result. Cases are cited in these connections. On the other hand, does finger-sucking undisturbed until the child is able to relinquish the gratification himself in the course of normal development result in facial and dental deformities? The author is of the opinion that constitutional characteristics or conditions which impede adequate breathing such as adenoids have more etiological significance for mouth deformities than finger-sucking. Nail-biting as well as nose-picking are regarded by the author as neurotic symptoms stemming from the forcible stopping of finger-sucking or masturbation and are themselves substitutive reactions. There is a special psychologic significance to the mouth and the teeth, with which children's dread of oral and dental examination is connected. Abreaction of the suppressed reactions during medical and dental examinations is a needful part of the whole therapeutic procedure. Otherwise, acute anxiety may develop.—F. C. Sumner.

1855. Segal, E. *Tatspiyot r'fuiyot-psikhologiyot bitkufat hashoa*. (Medical-psychological observations in the time of disaster.) *Higena ruhanit*, 1947/48, 5, 103-108.—Observations of a Jewish physician who was working as physician in ghettos and in German concentration-camps: (1) People want to escape from the shock to health. They did not go to hospitals; stomach disorders, diabetes etc. disappeared; menstruation which prevents hard work did not appear. (2) In the time of the greatest persecutions they dealt with every-day business, even if quite unnecessary.—H. Ormian.

1856. Seliger, Robert V. *A preliminary report on extramural treatment of severe delirium tremens with recovery in ten hours*. *Amer. J. Psychiat.*, 1948, 105, 129-130.—This preliminary report of patients with delirium tremens is presented to show

that they can be treated extramurally and rapidly by a very simple method. This expedient and technique has been used with safety and success by the author in the past 5 years in the uncomplicated cases of delirium tremens. Originally it was necessary to formulate a treatment technique due to unavailability of hospital beds and staff shortages. A case which illustrates the application of this procedure is included.—J. Barron.

1857. Tarjan, George. (*Pacific Colony, Spadra, Calif.*) *Current thinking regarding psychopaths*. *Amer. J. ment. Def.*, 1948, 53, 302-311.—A few of the problems in the field of psychopathy in general and diagnosis in particular are discussed. Classifying psychopaths, whether adults or youths, on a dynamic basis instead of on descriptive lines, is described as serving a useful purpose since this approach gives much better understanding of background, prognosis, and treatment.—V. M. Staudt.

[See also abstract 1689.]

SPEECH DISORDERS

1858. Monrad-Krohn, G. H. *Altered melody of language ("dysprosody") as an element of aphasia*. *Acta Psychiat.*, *Kbh.*, 1947, Suppl. 46, 204-212.—Following a head injury in an air raid, a woman showed, in addition to minor aphasic disturbances, a pronounced loss of the characteristic rhythms and melody of Norwegian, her native language. She talked with a "foreign" accent and as a consequence was taken for a German by people who did not know her. Monrad-Krohn considers this inability to speak one's native language with its characteristic intonations to be a genuine, if rare, type of aphasic disturbance and proposes that it be called "dysprosody."—A. L. Benton.

1859. National Society for Crippled Children and Adults. (*11 So. La Salle St., Chicago 3, Ill.*) *A speech correction bibliography*. Chicago: Author, 1949. 17 p. Free. (Mimeo.)—This bibliography is a selection of 187 titles available in the library of the National Society for Crippled Children and Adults. The entries are arranged under subject headings. There is a list of speech correction periodicals, and an author index.—C. M. Louitt.

1860. Tamm, Alfild. *Stottern und psyche*. (Stuttering and the psyche). *Acta Psychiat.*, *Kbh.*, 1947, Suppl., 46, 381-395.—Psychoanalytically oriented case reports illustrating the variety of psychodynamic factors which may enter into the etiology of stuttering.—A. L. Benton.

[See also abstracts 1697, 1894.]

CRIME & DELINQUENCY

1861. Alexander, Leo. (*Boston (Mass.) State Hosp.*) *War crimes and their motivation; the socio-psychological structure of the SS and the criminalization of a society*. *J. crim. Law Criminol.*, 1948, 39, 298-326.—The SS consisted of "front,"

"inner circle," and "behind the scenes" men. The structure is compared with other criminal societies. It is illustrated that an important fact concerning motivation of war crimes is that fear and cowardice, especially fear of ostracism by the group are at times more important motives than simple ferocity or aggressiveness. Several cases demonstrate the "blood cement" theory, i.e., the system of letting people become guilty in order to control them.—*V. M. Stark.*

1862. *Bromberg, Walter.* (*Belleview Psychiatric Hosp., New York.*) *Crime and the mind; an outline of psychiatric criminology.* Philadelphia: Lippincott, 1948. viii, 219 p. \$4.50.—The first quarter of this book provides historical background information regarding the criminal and his society; it traces the gradual evolution of punishment into attempted prevention and therapy and shows how psychology and psychiatry have come to play an important role in the criminal courts. The remainder of the book is devoted to a discussion of the individual criminal under the broad categories of the psychopathic personality, emotional immaturity, and the neurotic. The first is most easily recognized—even at an early age—and is most troublesome. Numerous examples are given of paranoid, schizoid, aggressive, and sexual psychopaths, with attempts to show how the personality is related to their serious criminal acts. Emotional and social immaturity with associated feelings of inferiority and anxiety may lead to crimes involving sex and other antisocial behavior. The large group of occasional offenders (felonies) appear to be gratifying an unconscious impulse by "acting out" the conflict, etc. A concluding chapter on the cure for crime emphasizes that therapy must be carried out in at least partial harmony with current legal thinking and practice; it is difficult and tedious, and needs the help of widespread public re-education; its research value leading to prevention will be of greatest importance. 10-page bibliography.—*C. E. Henry.*

1863. *Dirksen, Cletus.* *Economic factors of delinquency.* Milwaukee: Bruce Pub. Co., 1948. 94 p. \$2.00.—The relationships between economic factors and delinquency are examined. The findings indicate only an indirect relationship which, in itself, is significant and important. The author treats with the basic philosophy concerning the problem, and a number of environmental factors such as housing, poverty, etc. He points out that delinquency is one of the diseases which will aid in the collapse of the economic structure and continues that the time has come to rebuild the foundation of our society.—*R. D. Weitz.*

1864. *Foxe, Arthur N.* *Studies in criminology.* *Nerv. ment. Dis. Monogr.*, 1948, No. 76. 162 p.—An epitome of papers by the author and other writers (Hutchings, Lewis, Lowrey, Gault, Stragnell, and Bramwell), earlier presented elsewhere on various aspects of criminology. Emphasis is given to the psychoanalytic point of view in the discussion

of causal factors of delinquency and crime.—*R. D. Weitz.*

1865. *Greene, James E.* (*U. Georgia, Athens.*) *Motivations of a murderer.* *J. abnorm. soc. Psychol.*, 1948, 43, 526-531.—A defense witness discusses the case of a convicted murderer who was a dull normal constitutional psychopath. Clinical analysis reveals plausible relations between long-standing father hostility and the circumstances precipitating the murder of a stranger who criticized the subject. There was no attempt to hide the crime, nor was there any remorse for the victim. Despite the criminal's indifference to his own fate, he might unconsciously have been seeking punishment to ease life-long guilt feelings. Although the pathological trend was apparent in childhood, it might not have become dangerous in a simple environment. Weak control disintegrated in the army where companions led him to alcoholic and sexual excesses, between periods of uninhibited killing of strangers. Being unable to control impulses, he was dishonorably discharged. Neither military nor civil law grants immunities to psychopaths as is done in the case of psychotics.—*C. M. Harsh.*

1866. *Hentig, Hans von.* *The criminal & his victim; studies in the sociobiology of crime.* New Haven: Yale Univ. Press, 1948. viii, 461 p. \$6.00.—The psychology and psychopathology of crime are discussed from the standpoint of many different facets, including such remote matters as order of birth, speech defects, age of parents, handedness, color of hair, intelligence, slang, and tattooing. The author also treats the relationships between crime and the more common social factors including occupation, religion, native environment, etc. The author introduces a new thesis in criminology—the role of the victim. He points out how certain traits and tendencies of the victim shape and mould the aggressive proclivities of the criminal; how specific forms of crime are evoked by young people, by women, by the mentally depressed, by attitudes and weaknesses of minority groups, by the careless, and by the lonesome. The failure of present day methods of crime control is emphasized. Suggestions for improvement are offered and discussed.—*R. D. Weitz.*

1867. *Phillips, Edwin, & Stromberg, Elery.* (*Cleveland Coll., Cleveland 14, O.*) *A comparative study of finger-painting performance in detention home and high school pupils.* *J. Psychol.*, 1948, 26, 507-515.—Two groups of 25, one from a high school and one from a home for juvenile delinquents, each 12 boys and 13 girls, were given opportunity to finger paint under standard conditions. 17 categories of performance were noted. 14 are significant above the 5% level. Seven of the high school students showed typical delinquent patterns, and all were reported by teachers to be problem cases. The writers feel that early diagnosis and remedial efforts are possible with this technique.—*R. W. Husband.*

1868. **Reca de Acosta, Telma.** *Sobre un caso de un niño incendiario.* (About the case of a youthful incendiary.) *Arch. Med. legal, B. Aires*, 1948, 18, 173-182.—Incendiaryism is a relatively rare abnormal behavior of children. The case history of a boy of 6 whose abnormal behavior included stealing and fire-setting is given, together with abstracts of 12 psychotherapeutic sessions, including responses to Jung's word-association list. In the case presented, the fire-setting and the destruction of property are shown to be aggressive actions against his younger sister and his grandmother; but his distinctly abnormal behavior which was of sudden onset and of 3 months duration cleared up completely with psychotherapy. The term pyromaniac does not appear to be suitable to use with youthful incendiaries because the obsessive element does not exist in such cases. French summary.—*R. J. Corsini*.

1869. **Wattenberg, William W.** (*Wayne U., Detroit, Mich.*) *Boys in trouble, 1946; influence of sisters and broken homes.* Suppl. No. 1. Detroit, Mich.: Crime Prevention Bureau, Police Department, 1948. 72 p.—This is a supplementary report to a study originally published in 1946 based on data collected by the Crime Prevention Bureau of the Detroit Police Department. 39 tables pertaining to factors associated with delinquency and crime are presented and analyzed.—*R. D. Weitz*.

[See also abstract 1735.]

PSYCHOSES

1870. **Freeman, Walter.** (*George Washington U., Washington 6, D. C.*) *Transorbital leucotomy.* *Lancet*, 1948, 255, 371-373.—The operative technique for transorbital leucotomy in cases of psychosis is described. It is reported that the greatest change observed in patients is increased friendliness and sociability with general and undesirable changes in personality usually minimal. The operation appears to be most effective when tension is a prominent feature of the illness.—*A. C. Hoffman*.

1871. **Holmgren, Hjalmar, & Wohlfahrt, Snorre.** (*Beckomberga Hosp., Stockholm, Sweden.*) *Course of the blood sugar curve in mentally healthy subjects and in schizophrenics during adrenalin tolerance tests for a day and night.* *Acta Psychiat., Khb.*, 1947, Suppl. 46, 132-144.—Experiments with schizophrenic patients and a control group of normal subjects indicated that repeated injections of adrenalin do not raise the blood sugar level in normal subjects but do raise it appreciably in schizophrenics. It is concluded that the schizophrenic patient does not utilize blood sugar as well as does the normal individual. This conclusion is in accord with the authors' previous investigations of fasting blood sugar levels in normal and mentally diseased individuals.—*A. L. Benton*.

1872. **Kalinowsky, Lothar B.** (*Columbia U., New York.*) *Variations of body weight and menstruation in mental illness and their relation to*

shock treatments. *J. nerv. ment. Dis.*, 1948, 108, 423-430.—Observations of "many hundreds of patients" studied longitudinally through various stages of their illness modified by shock treatment showed definite decrease in body weight with relapse or development of more acute stages and increase in body weight with successful response to shock treatment. Since no external factor such as change in food consumption is involved, both change in body weight and mental status must be controlled by the "same unknown, probably central mechanism." This view seems to be substantiated by the frequent simultaneous occurrence of disturbances in menstruation and body weight in psychotic women and their readjustment with recovery. 15 references.—*N. H. Pronko*.

1873. **Kreisler, Oscar, Liebert, Erich, & Horwitt, M. K.** (*Elgin State Hosp., Ill.*) *Psychiatric observations on induced vitamin B complex deficiency in psychotic patients.* *Amer. J. Psychiat.*, 1948, 105, 107-110.—This paper reports some of the mental changes observed in patients of the Elgin State Hospital in the course of a study of a long-term vitamin B complex deficiency. The subjects selected for this study were divided into 3 groups, with 12 men in each group. The first 2 groups, A and B, respectively, received a daily diet containing about 2,200 calories, which was made adequate in all the essential nutritional elements except members of the vitamin B complex. The members of the third, the C group, were maintained on the customary diet of the hospital and ate it "ad libitum." It was indicated that vitamin B complex restriction caused severe primary mental changes or aggravation of pre-existing psychotic trends among the psychotic subjects. The character of the mental changes appear to depend on speed and severity of the deprivation. It appeared that mild vitamin B complex restriction permitted the individual to adapt himself to the change without much stress. Severe depletion accompanied by severe metabolic impairment and structural damage led to severe emotional discharges.—*R. D. Weitz*.

1874. **Ledgerwood, Richard.** (*Purdue U., Lafayette, Ind.*) *Patient as person: personality projection in paintings by psychotic patients.* *Proc. Ind. Acad. Sci.*, 1948, 57, 187-188.—Abstract.

1875. **Polatin, Phillip, Hoch, Paul H., Horwitz, William A., & Roizin, Leon.** (*New York State Psychiatric Institute, New York.*) *Presenile psychosis; report of two cases with brain biopsy studies.* *Amer. J. Psychiat.*, 1948, 105, 97-101.—Two cases of Pick's disease are presented in which brain biopsy studies were made. The clinical, differential diagnostic, and neuropathological aspects of these cases are discussed. The emphasis in presenile psychosis is no longer on changes in morphology but rather on the aberrations occurring in the metabolism of brain tissue. Neuropathologic and histometabolic findings are included with three illustrative plates. With newer methods and finer techniques a better understanding of previously obscure neuropsychiatric

disorders can be anticipated. 11 references.—R. D. Weitz.

1876. Reitman, F. (*Netherne Hosp., Coulsdon, Eng.*) Evaluation of leucotomy results. *Amer. J. Psychiat.*, 1948, 105, 86-89.—The leucotomy results of 60 patients who remained well after discharge were investigated. The findings are reported and evaluated. Considered herein are the factors of age, type of incision, personality changes, and the pre- and post-operative symptomatology.—J. Barron.

1877. Yakovlev, Paul I. (*Middletown, Conn.*), Weinberger, Maximilian, & Chipman, Catherine E. Heller's syndrome as a pattern of schizophrenic behavior disturbance in early childhood. *Amer. J. ment. Def.*, 1948, 53, 318-337.—Three cases of Heller's dementia infantilis are described and discussed. Certain features were discovered in these children that were in sharp contrast to the development of other children during the same age period. These features are summed up by the authors as follows: (1) The immutability of the behavioral pattern as to its psychomotor content and postural configuration after the recorded onset of the behavior disorder at two, one, and one and a half years respectively to puberty. (2) The failure of maturation of behavior in the spheres of symbolized thought, language, and matter-shaping-tool-handling, or manufacturing motility which does things with things, rather than merely to things. (3) The stereotyped similarity of certain rigidly patterned configurations of the psychomotor activity in all 3 boys who came from different families and never lived together even in the institution. The biological as well as the psychological implications of this specific disorder are treated in detail.—V. M. Staudt.

[See also abstracts 1678, 1712, 1783, 1795, 1802, 1841.]

PSYCHONEUROSES

1878. Bell, Eric, Jr., & Karnosh, Louis J. Tetraethyl ammonium chloride as an adjunct in treatment of psychovisceral manifestations of anxiety. *J. nerv. ment. Dis.*, 1948, 108, 367-372.—"Observations were made on the clinical effects of tetra-ethyl ammonium in 48 patients having varying types of neuroses. The effect of the drug on patients with a pure anxiety state is fairly uniform, predictable, and beneficial. The effect on patients with a conversion neurosis or psychastenia is unpredictable and varied. In general, tetra-ethyl ammonium chloride serves as a useful symptomatic device in weakening at least one of the links in the psychovisceral complex responsible for some of the subjective and objective discomforts in patients with anxiety neuroses."—N. H. Pronko.

1879. Bitter, W. *Die Angstneurose; Entstehung und Heilung.* (Anxiety neurosis; origin and cure.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1948, No. 16. 191 p.—The first part of this monograph covers the background of neurosis theory, psychiatric investigation,

psychotherapeutic investigation, Freudian psychoanalysis, individual and group psychology, Jung's complex psychology, neurosis structure, and therapy. It concludes with a critical review of the various schools, and a detailed discussion of 4 categories of "space" anxieties. The second part consists of a case report taken from Freud, the first part of a case report from Jung, and comments on these cases. Much use is made of brief case reports and detailed references to the works of other authors.—R. B. Ammons.

1880. Kilby, Richard W. (*U. Denver, Colo.*) Psychoneuroses in times of trouble: evidence for a hierarchy of motives. *J. abnorm. soc. Psychol.*, 1948, 43, 544-545.—Maslow's hierarchical theory of motives postulates that the less important needs for esteem and self-actualization will be displaced or dominated by physiological needs for self-preservation. In support of this postulate it is observed that psychoneuroses decreased during the Blitz and have become rare in Germany where hardship is widespread. Likewise, men suffering from prolonged hunger report thoughts and perceptions dominated by food, with loss of interest in previously important concerns.—C. M. Harsh.

1881. Meduna, L. J. (*Illinois Neuropsychiatric Institute, Chicago.*) Alteration of neurotic pattern by use of CO₂ inhalations. *J. nerv. ment. Dis.*, 1948, 108, 373-379.—Since the essential difference between a psychoneurotic and a normal person is to be found in the relatively greater "disproportion between excitement and excitability" of the former, then any procedure which will increase the threshold of stimulation of the brain will facilitate reestablishment of the homeostatic balance and thus change behavior as the expression of the balance so achieved. Treatment consists of administrations of anesthesia-inducing inhalations of CO₂ over a period of time. In some patients there is a slow diminution and final disappearance of symptoms which cannot be explained. Other patients abreact their emotions during treatment while still others have dreams unrelated to reality during which they discharge their emotions. Contraindications as well as indications for treatment are specified.—N. H. Pronko.

1882. Miller, K. Zum Grundrib einer praktischen und theoretischen Tiefenpsychologie. (Toward the basis of a practical and theoretical depth psychology.) *Psyche*, 1947, 1, 189-205.—Neurosis can arise only insofar as the human attempts to deceive himself constantly about a "knowledge," and constantly does not want to have something true which can disturb him, or endanger his existence and self-security. Such is the guilt complex which permeates all neurosis never in a purely pathological manner, but rather as the essential expression of responsibility which he more or less consciously feels is the cause of the beginning and continuance of his neurosis.—P. L. Krieger.

1883. Sargent, Wm., & Stewart, C. M. Chronic battle neurosis treated with leucotomy. *Brit. med. J.*, 1947, 2, 866-869.—A case is reported in which

chronic battle neurosis persisting intermittently after severance from service despite every kind of psychotherapy was at last treated successfully with leucotomy.—*F. C. Sumner.*

1884. Schottlaender, F. Phobie. (Phobia.) *Syche*, 1947, 1, 167-188.—We have no right to retreat from the world into which we are born in favor of the personalistic world of images from which we come. We dare not withdraw ourselves instead of bravely taking on the risks of life. In every human's consciousness is simultaneously revealed all the terror and bliss of an indestructible imperative; the need to realize the essence of life in struggle and love, and to fulfill his inner law to the honor of the earth.—*P. L. Krieger.*

1885. Schottlaender, F. Über Einsamkeit, Polarisation und dramatisches Bedürfnis. (Concerning solitude, polarization and dramatic need.) *Syche*, 1947, 1, 24-40.—For the well, life is full of living drama most clearly revealed in the struggle for existence and in love. Conversely the life for the neurotic is strangely colorless. The neurotic cannot polarize and does not even experience the dramatic. He knows only himself living in a private world without relationship to an alterego, and without ability to imagine himself in relation to the environment and peculiarities of others. He is incapable of polarization, both to his own life tasks and future goals, as well as toward his fellow men.—*P. L. Krieger.*

1886. Smith, Harry L., & Hightower, Nicholas C. (Mayo Clinic, Rochester, Minn.) Incidence of functional disease (neurosis) among patients of various occupations. *Occup. Med.*, 1948, 5, 182-185.—Using a control group of 300 patients consecutively admitted to the Mayo Clinic, the authors assembled data for patients representing various occupations, and additional information was obtained from a group of Jews, and a group of unmarried women. The material on the Jewish group was obtained because it is frequently supposed that the incidence of neurosis is higher. The occupational groups include clergymen, dentists, farmers, housewives, lawyers, nuns, physicians, railroad engineers, and school teachers. It had been observed clinically that railroad engineers were seen infrequently at the clinic. The percentages for "purely functional disease" range from 27% for housewives to 4% for railroad engineers.—*B. M. Eves.*

[See also abstracts 1717, 1783, 1793.]

PSYCHOSOMATICS

1887. Alexander, Franz, & French, Thomas Morton. [Eds.] (Institute for Psychoanalysis, Chicago, Ill.) Studies in psychosomatic medicine; an approach to the cause and treatment of vegetative disturbances. New York: Ronald Press, 1948. xiii, 568 p. \$7.50.—This is a collection of papers written by 20 members of the staff of the Chicago Institute for Psychoanalysis over a period of 16

years and reprinted in this volume. The papers, which are concerned with the emotional factors in chronic disturbances of the vegetative organs, have been classified according to type of disturbance.—*A. J. Sprow.*

1888. Curran, Charles A. (St. Charles Coll., Columbus, O.) Nondirective counseling in allergic complaints. *J. abnorm. soc. Psychol.*, 1948, 43, 442-451.—Experience in an allergy clinic showed that patients who give negative skin-test reactions are much more emotional during interviews and reveal more personal problems. Fairly nondirective counseling is effective in promoting insight as to the psychogenic origins of allergies. With children, play therapy serves the same purpose. Remarks and case histories are cited to illustrate how counseling promotes better adjustment and physical condition.—*C. M. Harsh.*

1889. Dunbar, Flanders. Synopsis of psychosomatic diagnosis and treatment. St. Louis, Mo.: C. V. Mosby, 1948. 501 p. \$6.50.—This volume, prepared as a "guidebook in newer methods of diagnosis and treatment" for use by the general medical practitioner, extends Osler's approach and is comprised of 3 parts and 17 chapters. Part 1 (3 chapters) deals with introductory definitions and with the problem of proneness to psychosomatic dysfunction; Part 2 (10 chapters) reviews problems in psychosomatic medicine as related to the gastrointestinal, circulatory, respiratory, genito-urinary, and other systems; Part 3 (4 chapters) summarizes the psychosomatic approach in relation to the specialities of psychiatry, industrial medicine, pediatrics, and geriatrics. 27-page reference list.—*L. A. Pennington.*

1890. Harrington, David O. (384 Post St., San Francisco, Calif.) Psychosomatic interrelationships in ophthalmology. *Amer. J. Ophthal.*, 1948, 31, 1241-1251.—Ocular disturbances of psychogenic origin include ocular conversion symptoms (blepharospasm, convergence spasm, asthenopia, photophobia, hysterical amblyopia and amaurosis) and ocular vegetative neuroses (ciliary spasm, amaurosis fugax, central angiospastic retinopathy, migraine, glaucoma). The fact that psychic trauma may be an important causal factor in glaucoma is emphasized as its recognition may lead to a more complete therapy of the disease. 31 references.—*D. Shaad.*

1891. Schachter, M. (Faculty of Medicine, Marseilles, France.) Les formes camouflées de la migraine familiale; un complexe psycho-somatique révélé grâce au test de Rorschach. (Camouflaged forms of familial migraine; a psychosomatic complex revealed by the Rorschach test.) *Praxis*, 1947, 36, 779-781.—Rorschach examination of a 28-year old man suffering from migraine revealed psychosexual conflict. Medical examination had revealed no basis for the migraine, but interview following the Rorschach examination revealed the details of his conflict.—*F. C. Sumner.*

1892. Snaith, Linton, & Ridley, Brenda. (*Newcastle-upon-Tyne General Hosp., Eng.*) Gynaecological psychiatry; a preliminary report on an experimental clinic. *Brit. med. J.*, 1948, 2, 418-421.—Impressions are reported which were gleaned during 2 years' work in a clinic established within a gynaecological clinic to serve a two-fold purpose: (1) to assess the degree to which somatic symptoms in particular cases were influenced by psychological factors, and (2) to give such short-term psychotherapy as was practicable. Of 165 patients with psychoneuroses of varying degrees of severity, 46% were considered to possess psychologically unstable constitutions. Factors found productive of neuroses are in the order of their frequency: faulty personal relations to husband or in-laws; maladjustment to husband related to frigidity and dyspareunia; sexual frustration and fear of pregnancy; sexual frustration and abdominal pain; emotional immaturity; infertility; phobias; unsatisfactory housing condition producing anxiety states; separation from husband on national service; inadequate social outlets; financial stress. Psychotherapy was attempted in 84 cases.—F. C. Sumner.

1893. Treuting, Theodore F. (*New York Hosp.*), & Ripley, Herbert S. Life situations, emotions and bronchial asthma. *J. nerv. ment. Dis.*, 1948, 108, 380-398.—A series of 51 patients was given skin tests for allergic reactions. 28 patients had positive reactions to one or more of these substances, while 23 had negative reactions. Relationship between skin reactions and occurrence of symptoms showed no information available in 19 cases, no connection between the two in 30 cases, and definite connection in 2 cases. Seasonal variation was observed in 5 cases, seemed probable in 7, and was unknown in 2 cases. The other 37 cases had asthma without relation to the season of the year. As regards emotional reactions, in 36 cases symptoms followed during or after emotional reactions on the part of the patient; in 12 cases, emotional factors played a role and in 2 cases there was no relation between the symptoms and emotional factors, while in one case no information was available. Five *pollen* sensitive patients submitted to heavy concentrations of pollen inhalation showed no asthmatic reaction despite an early history of seasonal asthma. Personality characteristics of asthmatics are described.—N. H. Pronko.

CLINICAL NEUROLOGY

1894. Bosley, Elizabeth. Development of sucking and swallowing. *Spastic Rev.*, 1948, 9(12), 10-12.—This article stresses the importance and means of developing sucking and swallowing reflexes in the cerebral palsied infant as an aid to the later development of proper speech habits in the child.—(Courtesy of *Bull. Curr. Lit. Nat. Soc. Crippled Child.*)

1895. Brain, W. Russell. Some observations on visual hallucinations and cerebral metamorphopsia. *Acta Psychiat., Kbh.*, 1947, Suppl. 46, 28-40.—The cases of 2 patients who experienced visual hallucinations and other visuopsychic disturbances are re-

ported. In one case the disturbances occurred as a consequence of hypertensive encephalopathy and in the other case occurred in an alcoholic. The phenomena are compared with those occurring in mescaline intoxication and possible cerebral localizations are advanced. 16 references.—A. L. Benton.

1896. Magoun, H. W., & Rhines, Ruth. (*Northwestern U., Med. Sch., Chicago, Ill.*) Spasticity; the stretch-reflex and extrapyramidal systems. Springfield, Ill.: Charles C. Thomas, 1948. vii, 59 p. \$1.85.—The physiology and neurology of the stretch reflex in relation to spasticity is discussed. Chapters on the Stretch Reflex, Central Inhibition of the Stretch-Reflex, Release Versus Influx Theories of Spasticity, and Central Facilitation of the Stretch-Reflex serve to bring the reader a summary of the current literature on this subject. A chapter on General Considerations serves to summarize briefly the implications from physiology and neurology and to point out the direction that surgical and pharmacological techniques may take in the amelioration of this condition. 90-item bibliography.—M. A. Seidenfeld.

1897. Nathanson, Morton (*New York U., Coll. Med.*), & Wortis, S. Bernard. Severe rigidity in performance and thought in a case of presenile degenerative disease. *J. nerv. ment. Dis.*, 1948, 108, 399-408.—A case of a 49-year-old woman is presented as that of Pick's disease. Principal pathology was found in the cortex of the frontal and part of the parietal lobes bilaterally although to a lesser extent the corpus callosum and subcortical ganglia were involved. Behaviorally, the patient showed a serious rigidity in tests involving writing and drawing, object naming, calculation and in the Kohs Block Test. Cortical and subcortical damage as well as pre-morbid personality structure are considered in explaining this rigidity.—N. H. Pronko.

1898. Ottonegro, P. (*U. Parma, Italy.*) Il complesso verbo-mimico-emotivo e le sue variazioni patologiche fondamentali. (The verbo-mimetic-emotional complex and its basic pathological variations.) *Riv. Psicol.*, 1947, 43, 143-153.—The author stresses the importance of pathological modifications of (1) the voice's harmony, (2) the articulation of words, (3) emotionality and its mimetic expressions, all of which one can regard as an aspect of the personality. Pathological variations of this verbo-mimetic-emotional complex serve to distinguish 4 types of disorder: (1) by incoordination, cerebellar lesions; (2) by dissociation, frontal lesions; (3) by viscosity, extrapyramidal lesions; (4) by spasm, pseudobulbar paralysis.—F. C. Sumner.

1899. Symonds, Charles. (*Guy's Hosp., London, Eng.*) Epilepsy. *Brit. med. J.*, 1948, 1, 533-537.—An exposition of the nature of epilepsy is given in the light of the new instrument of research, the electro-encephalogram (E.E.G.). This instrument has revealed many variants of epilepsy notably focal as distinguished from idiopathic. Modern methods of pathological diagnosis and the etiology of idiopathic and focal epilepsy are discussed as well as the some-

what difficult distinction between epilepsy and syncope and the value of E.E.G. in providing scientific proof of the efficacy of anticonvulsant drugs. Epilepsy becomes a social problem when it is a matter of the education, employment, and granting of license to drive an automobile.—*F. C. Sumner.*

[See also abstracts 1589, 1710, 1812, 1835.]

PHYSICALLY HANDICAPPED

1900. **Albright, M. Arline.** (*Marquette U., Milwaukee, Wis.*) **Audiometric testing methods and classification of original hearing acuity response curves.** *Amer. Ann. Deaf*, 1948, 93, 360-376.—After giving audiometric examinations to 130 children in a day school for the deaf, the results were classified on the basis of various comparative analyses. Conclusions suggest that an acuity coefficient can not be used for diagnosis or therapy; an acuity coefficient varies with the method used to calculate it.—*H. R. Myklebust.*

1901. **Cox, Ian.** **Deafness in young children.** *Amer. Ann. Deaf*, 1948, 93, 330-332.—The author describes a method of testing the hearing of young children. The method is referred to as the "Peep Show." The apparatus consists of a box with a viewing space through which a picture can be seen when illuminated by the "signal lamp." Also, a pure tone generator and attenuator. The sound impulses are synchronized with the light impulses. The technique consists of attracting the child's attention to the signal lamp and using synchronized impulses of light and sound. While these impulses are being used the child is trained to press a "bell push," which illuminates the picture. As soon as the child has learned to respond the visual signal is withdrawn and only the auditory is used.—*H. R. Myklebust.*

1902. **Kirk, Samuel A.** (*U. Illinois, Urbana.*) & **Perry, June.** **A comparative study of the Ontario and Nebraska tests of the deaf.** *Amer. Ann. Deaf*, 1948, 93, 315-323.—The authors compared ratings from the Ontario School Ability Examination with those from The Nebraska Test of Learning Aptitude. IQ's on the Ontario Test were compared with the IQ's of the Nebraska Test when both tests had been administered to 49 deaf children in attendance at a day school. Also, the Ontario IQ's and Nebraska IQ's were compared with Stanford-Binet IQ's when all 3 tests had been administered to 49 hearing children. The Ontario School Ability Examination rated subjects consistently higher than the Nebraska Tests both when used with the deaf and the hearing. When administered to the hearing the Ontario is in closer agreement with the Binet Test than is the Nebraska Test.—*H. R. Myklebust.*

1903. **McAndrew, Helton.** (*Duke U., Durham, N. C.*) **Rigidity and isolation: a study of the deaf and the blind.** *J. abnorm. soc. Psychol.*, 1948, 43, 476-494.—Observations suggest that the blind suffer from physical isolation and that the deaf suffer even more from mental and social isolation. The effects

of isolation on rigidity were studied in 25 deaf, 25 blind, and 25 normal children (ages 10 to 15), equated for intelligence on appropriate parts of the Wechsler scale. Exp. I: When shown how to model clay balls, sticks and canes, the blind children persisted most rigidly in the routine task; the deaf became satiated almost as rapidly as normals, but continued free modeling over twice as long. Exp. II. On a level of aspiration test, blind and normals reacted similarly, but the deaf were more rigid. Exp. III. In reclassifying 25 blocks, only 4 deaf children succeeded, whereas all of the blind and normals did so. Exp. IV. On the Rorschach test, deaf subjects gave only one third as many responses as normals, with many W, F and FM responses and little differentiation. All experiments showed rigidity associated with isolation.—*C. M. Harsh.*

1904. **Norwick, Sydney.** **Physicians and vocational rehabilitation for civilians.** *Occup. Med.*, 1948, 5, 368-373.—The state vocational rehabilitation service includes (1) psychologic testing to determine vocational aptitudes, (2) vocational counseling, (3) job testing to see whether the correct choice had been made, (4) vocational training, and (5) suitable employment. "The vocational rehabilitation program was designed to bring together the vocational training agencies, who had been trying since 1920 to do this job without doctors, and the physicians, who had been trying to get the job done without vocational training and objectives for an even longer time. . . . Perhaps expansion of these centers will be accomplished, and ultimately they will be connected with the university medical schools for teaching and research, as well as for provision of services."—*B. M. Eves.*

1905. **Templin, Mildred C.** (*U. Minnesota, Minneapolis.*) **A comparison of the spelling achievement of normal and defective hearing subjects.** *J. educ. Psychol.*, 1948, 39, 337-346.—An analysis of spelling errors was made on three groups of 78 deaf, 78 hard of hearing, and 78 children whose hearing was normal. The groups were matched for age, grade placement, Pintner Non-Language Mental Test scores and sex. The deaf misspelled about half as many words as the hard of hearing and about one-third as many as the normal hearing pupils. All differences were significant above the 1% level of confidence. Contributory factors are probably the superior visual word perception of the deaf, the greater emphasis placed on drill in their training, and the fact that spelling is essentially a drill skill.—*E. B. Mallory.*

[See also abstracts 1632, 1938.]

EDUCATIONAL PSYCHOLOGY

1906. [Anon.] **Some classroom problems: solved and unsolved.** *Understanding the Child*, 1948, 17, 115-119.—A set of 13 cases dealing with mental hygiene and teaching is presented.—*J. L. Gewirtz.*

1907. **Bristow, William H.** **Sociometry, sociodrama and the curriculum.** *Sociometry*, 1948, 2,

73-74.—"Through sociometric techniques teachers and professional workers are able to come to a better understanding of the needs of children, the role which children have accepted for themselves, how they feel about things, what relationships they have to their peers and adults. . . . Curriculum activities planned on this basis are much more likely to take into account the needs of children, their previous experiences, their wishes, their goals, their hopes, and their aspirations."—R. B. Ammons.

1908. Coleman, Mary Elisabeth. *Trends in the development of comprehension throughout the elementary school*. Chicago: University of Chicago Library, Dep. of Photographic Reproduction, 1947. 166 p.—Microfilm copy of typewritten thesis (166 p.). 3-page bibliography.

1909. Crow, Lester D., & Crow, Alice. (*Brooklyn Coll., Brooklyn, N. Y.*) *Educational psychology*. New York: American Book Company, 1948. xiv, 599 p. \$4.00.—Educational applications elementary psychological facts and principles regarded as of value to teachers and prospective teachers are divided into seven areas: (1) nature and scope of educational psychology and the psychological aspects of teaching; (2) maturation; (3) learner potentialities and their significance in the learning process; (4) principles of learning; (5) educational measurement; (6) the psychology of subject learning areas; and (7) life adjustments including exceptional children, behavior drives and mental hygiene. A selected bibliography follows the textual treatment of each chapter.—F. A. Fredenburgh.

1910. Fox, Lorene K. *The rural community and its school*. New York: King's Crown Press, 1948. xi, 233 p. \$3.25.—This book is a thorough "study of rural life and education" in a typical American community, Chautauqua County, New York. Detailed treatment is given to such items as: Land and its People, Historical Background, Home Farm and its Community, the Rural Schools, Churches and Governmental Machinery, and the People's Life and their Attitudes. Of particular interest are the chapters on cultural conflict, and a proposed educational program. Supplementary notes and bibliography for further research are noted phases of this study.—S. Kasman.

1911. Gates, Arthur I. (*Teachers Coll., Columbia U., New York.*), Jersild, Arthur T., McConnell, T. R., & Challman, Robert C. *Educational Psychology*. (3rd ed.) New York: Macmillan, 1948. xx, 818 p. \$4.25.—In the third edition of this text, the authors present "a survey of facts and principles of educational psychology [that] . . . will be of most value to students preparing for the teaching profession." The text includes sections on child development, intelligence and various aptitudes, measurement and evaluation, principles of learning with classroom applications, and mental hygiene and guidance. Specific and general references, and questions and exercises are provided at the end of each chapter. (see 16: 2862).—W. Coleman.

1912. Ivanov, S. V. *O soznatelnosti v obuchenii*. (The principle of conscious understanding in instruction.) *Sovetsk. pedag.*, 1947, No. 10, 45-62.—"Conscious understanding is the most important principle of instruction in our schools. The demand for conscious understanding in the process of instruction stems from the task which is currently facing us of giving the growing generation a broad education which will enable them to establish communism." This generation must be equipped with the best of knowledge and an explicit understanding of its goals. "At the present time, the principle of *training* has been carried to extremes in bourgeois countries. Even if we forget the fascist countries, in the USA and Great Britain the essence of training may be reduced to the cultivation and development of habits. . . . Pragmatism and the behavioristic orientation of American psychology and pedagogy furnish the theoretical bases for the underestimation of the principle of conscious understanding in instruction."—R. A. Bauer.

1913. Nohl, Herman. (*Goettingen U., Germany.*) *Vom Wesen der Erziehung*. (The idea of education.) *Sammlung*, 1948, 3, 325-332.—In spite of the recognized relativity of cultural forms there is an autonomy in the idea of education. True education does not ask about the value a person has for an objective task, but at first about the value which the objective task has for the individual. The basis of all education is the relationship between the child and the educator. Happiness—which does not mean egotistic pleasure—is the source and characteristic of real life. "Only the happy man is good." Goal of the new education in Germany after all the moral destruction must be an education to a new elementary spirituality in contrast to the spirituality of higher education. "We must learn again to live." It is not enough to make changes in organization, but it is important to find the true educational spirit.—C. Bondy.

1914. Partridge, Deborah Cannon. (*Tuskegee Institute, Ala.*) *Helping teachers understand the nature of learning*. *Understanding the Child*, 1948, 17, 113-114.—The principles that should guide the teacher in "planning the learning situation" are enumerated. Stress is placed on motivation, participation, and the influence of the emotions.—J. L. Gewirtz.

1915. Schwebel, Milton, & Asch, Morton J. (*Champlain Coll., Plattsburg, N. Y.*) *Research possibilities in nondirective teaching*. *J. educ. Psychol.*, 1948, 39, 359-369.—Non-directive teaching techniques were applied in 3 college classes. Student evaluation of the technique revealed that there was a tendency for well-adjusted students to approve it, and for the poorly adjusted to prefer directive teaching. More outside reading was done by those who approved. Students who were rated least adjusted tended to be at both ends of the participation scale. Students who were rated best adjusted showed more than average participation. The authors believe that a non-directive class situ-

ation provides an opportunity for group therapy. 15 references.—*E. B. Mallory.*

1916. Sorenson, Herbert. (*U. Kentucky, Lexington.*) *Psychology in education.* New York: McGraw-Hill, 1948. xiv, 535 p. \$4.00.—This is the second edition of a text first published in 1940. (see 14: 4752) In keeping with recent research considerable emphasis is given to the physical, mental, and social development of the pupil, as well as to his emotional life and adjustment. Two new chapters have been added to the book in the revision—one dealing with the mental health and personal adjustment of the teacher, and the other with basic motives. Examples and illustrations used throughout the book are drawn from school and social situations. Each of the 22 chapters is introduced with a reading guide or "What to Look For," and is concluded with a summary and review, a test of thinking made up chiefly of practical problems and situations that may confront the teacher, and a selected bibliography. An appendix, explaining necessary statistical and experimental concepts, and a glossary of terms are included.—*A. S. Artley.*

SCHOOL LEARNING

1917. Bradford, Leland, & Sheats, Paul. (*National Education Association, Washington 6, D. C.*) *Complacency shock as a prerequisite to training.* *Societry*, 1948, 2, 37-46.—Training of supervisors is frequently unsuccessful because the trainee has a vested interest in a certain kind of behavior, he has had no experience with other ways of behaving, he fails to see the total problem, or he is insecure. In this case the trainer must "provide a shock to the trainee's satisfaction with his present levels of behavior." Two examples are given of efforts to create a desire for training through use of complacency shock.—*R. B. Ammons.*

1918. Dotson, George E. (*Long Beach City Coll., Calif.*) *The importance of education for family life.* *Understanding the Child*, 1948, 17, 99-101.—An overall picture of what education for family life should include is presented. That education must provide homemaking skills, orientation to relationships with the opposite sex, child-rearing skills, and knowledge of the problems of parenthood. An example of a popular family life program is appended.—*J. L. Gewirtz.*

1919. Flanders, Ned Allen. (*U. Chicago, Ill.*) *Verbalization and learning in the classroom.* *Elem. Sch. J.*, 1948, 48, 385-392.—To explore the relationship between verbalization and learning, statements of 22 pupils in 7th grade arithmetic were recorded over 17 one-hour periods of class instruction, categorized according to content and level of operation in problem solving, and statistically treated to produce three measures of verbalization. The verbalization data were correlated with two tests used as criteria of learning status. A correlation of .72 was found between operating level of statements and final scores of both tests (based on 16 pupils

making 23 or more statements); other correlations were insignificant. It is concluded that statements made by students during a period of learning can be related to learning status, the relationship being independent of content and dependent on the level of operation of statements in this case, though the evidence does not preclude the assumption that content can be related to achievement measured by the difference between pre-test and final test scores.—*G. H. Johnson.*

1920. Fults, Anna C. (*Arkansas State Teachers Coll., Conway.*) *An experiment in human relations.* *J. Home Econ.*, 1948, 40, 71-72.—An experimental program with beginning home economics students in 3 Arkansas high schools sought to test the assumption that both individual and group changes might result if techniques for fostering good human relations in the classroom were used and if attempts were made to treat social and emotional causes of learning difficulties in individual cases. The following changes over a six-month period made by students singled out for individual attention were significant at the 1% level: increase in social acceptability, improved reading ability, increase in intelligence test scores. Teachers' ratings for these students revealed increased effectiveness in classwork.—*A. F. deGroat.*

1921. Fults, Anna Carol. (*Arkansas State Teachers Coll., Conway.*) *Improving learning through an emphasis on human relations.* *Childh. Educ.*, 1948, 24, 305-307.—Students identified as having difficulties in learning were tested along with the total group to get clues as to causes of learning difficulties. A five-months period of instruction in which the major emphasis was upon the furtherance of good human relations was followed by retests. Daily logs of work and anecdotal records were kept by the teachers, who met once a week for discussion of techniques and approaches. The results showed significant increases in social acceptance, reading skills, and intelligence as measured by a psychological test, as a result of the experimental program.—*G. H. Johnson.*

1922. Glenn, Neal E. *Research and literature related to teaching problems in music education.* *Illinois State Norm. Univ. Bull.*, 1948, 46(211), 28-41.—A review of literature concerned with musical ability and skill, including the development of musical ability and its relation to intelligence, measurements of musical capacity, music reading, pitch deficiency, singing ability, instrumental music, and musical meaning. 46 item bibliography.—*C. M. Louttit.*

1923. Holway, Amy R. (*Merrill-Palmer School, Detroit, Mich.*) *Human relations for college freshmen.* *J. Home Econ.*, 1948, 40, 135-136.—A wide range of techniques, including the discussion of personal problems, use of true stories to illustrate problems, lectures by specialists, trying out of adjustment techniques, individual counseling, etc., were utilized over a two-year period in experimental discussion groups in the psychology of adjustment applied to human relations. Rated as most helpful in improving students' relationships were: (1) dis-

cussions, (2) true stories, (3) special lectures. Improved human relations and the development of new insights into the dynamics of human behavior were reported by a sizeable number of students enrolled. A reduction in the average number of problems developed by freshmen in their first semester was noted.—*A. F. deGroat.*

1924. Irick, Paul. (*Purdue U., Lafayette, Ind.*) A study of factors related to student progress in mathematics. *Proc. Ind. Acad. Sci.*, 1948, 57, 178.—Abstract.

1925. Kaplan, Louis. (*Oregon College of Education, Monmouth.*) Modern trends in teaching language arts in the elementary school. *Elem. Sch. J.*, 1948, 48, 476-483.—The author discusses the influence of experimental philosophy, organicism psychology, and the recognition of individual differences on the development of new methods, aims, and outcomes in the fields of oral language (creating stimulating social situations which encourage exchange of thoughts and ideas and self-expression; use of conversation as a mental-hygiene measure), teaching of reading (experience method), reading readiness, reading interests (use of films, television, radio story hours to compete with cheap literature), human differences (helping each child to achieve his potentialities without insistence on obtaining group norms), spelling (deriving words to be spelled from thoughts and experiences), grammar (incidental to reading and writing as it proved necessary), and penmanship (manuscript writing).—*G. H. Johnson.*

1926. Kekcheev, K. Kh., & Schwartz, L. A. *K voprosu o borbe s utomleniem u shkolnikov.* (The problem of combating fatigue in school children.) *Sovetsk. pedag.*, 1945, No. 8, 50-51.—The work of Academician L. A. Orbeli and his co-workers has shown that the functional condition of the brain is determined by the influence of the vegetative nervous system on the brain. By acting on the vegetative system, we can influence the work potentiality of the human being. The present work was carried out on second grade children who were studying the Russian language and arithmetic. Both the control and experimental groups were given four "lessons" in each subject. Before the fourth lesson, the experimental group ducked their faces in cold water. In all cases the experimental group did better than the controls. In the case of the arithmetic "lesson," the experimental groups all improved from 40% to 60%, while the control groups got from 35% to 80% worse.—*R. A. Bauer.*

1927. Koenker, Robert H. (*Ball State Teachers Coll., Muncie, Ind.*) Arithmetic readiness at the kindergarten level. *Proc. Ind. Acad. Sci.*, 1948, 57, 189.—Abstract.

1928. Moser, Harold E. (*State Teachers Coll., Towson, Md.*) Advancing arithmetic readiness through meaningful number experiences. *Childh. Educ.*, 1948, 24, 322-326.—Readiness is not only a result of complex neurological development, but is also an outgrowth of training and experience. To

assist in promoting arithmetic readiness, genetic studies of the development of children's number ideas point to the utilization of pre-symbolic kinds of learning activities, through which manipulatory performance level activities pave the way for the higher levels of thought and use of symbols.—*G. H. Johnson.*

1929. Oak-Bruce, Lura. (*State Department of Education, Concord, N. H.*) *What do we know . . . for sure?* *Childh. Educ.*, 1948, 24, 312-316.—Readiness is a concept which has been simplified and overworked in efforts to explain away school adjustment problems of certain children. Readiness does not necessarily come with age or eagerness, but may depend upon what happens to the child in the school which affects the needs of the child for feelings of security, understanding, and sympathy. Lack of maturation may partly account for lack of readiness, but other factors may be adversely affected by passing of time; these may include lack of stimulating environment in the home, which removes incentive, and certain remediable and alterable details such as negative attitudes, false conceptions about school, poor eyesight and hearing loss, and other such factors. To carry out a prevention program the cleavage between home and school must be closed during the pre-school period, by promoting understanding and cooperation of the parents.—*G. H. Johnson.*

1930. Redmount, Robert S. (*Pennsylvania State Coll., Pa.*) Description and evaluation of a corrective program for reading disability. *J. educ. Psychol.*, 1948, 39, 347-358.—A six-weeks summer clinic was designed to provide training in corrective reading methods for teachers and to provide a resident program of corrective reading for 23 children with reading difficulties. The 24-hour-a-day schedule included both free and organized activity and was planned to permit centering each child's reading program around his interests in an atmosphere of informality and freedom. Reading tests given before and after the session, showed 48% improved and 12% with lower scores. Rorschach tests, also given at these times, indicated that 39% of the children showed personality improvement, and 26% were adversely affected by the program. A comparable control group, returned after 6 weeks elsewhere, showed less Rorschach change in either direction. Rorschach tests revealed 65% of the teachers to have some degree of non-adjustment. Children assigned to well-adjusted teachers improved more than those assigned to poorly adjusted teachers. Children who were most poorly adjusted at the beginning improved least.—*E. B. Mallory.*

1931. Schindler, Alvin W. (*U. Maryland, College Park.*) Readiness for learning. *Childh. Educ.*, 1948, 24, 301-304.—Nine factors which determine readiness for learning are health and physical well-being, physical development and condition, emotional adjustment, social adjustment, adequate vocabulary, adequate command of language, adequate background of concepts, command of foundation skills, and interest and purpose. Implications of these

factors for the curriculum are mentioned briefly. The concept of readiness applies to all learning and levels, and the individual is subject to improvement in readiness regardless of native ability. Motivation and readiness are not the same, though related; the motivation is aroused by what the teacher does but the pupils are not necessarily ready even though motivated.—*G. H. Johnson.*

1932. Steiner, Eric. *Test your teaching methods.* *Etude*, 1948, 66(12), 730; 774.—This test of piano teaching contains 10 questions so arranged as to show how strict the teacher is with her pupils. An arbitrary scoring system is employed.—*P. R. Farnsworth.*

1933. Storm, Grace E. (*U. Chicago, Ill.*) *A study of intermediate-grade reading skills.* *Elem. Sch. J.*, 1948, 48, 484-493.—Analysis of the manuals or guidebooks accompanying 8 widely used basic series of reading textbooks resulted in a classification of silent reading skills in the middle grades in the following categories: vocabulary enrichment and expansion, phonics and word recognition, comprehension and interpretation, organizing ideas, evaluating ideas, and locating information. Techniques for developing skills in each of the areas are discussed.—*G. H. Johnson.*

1934. Voitulevich, V. I. *Proverka znanii v sredni shkole.* (*Testing knowledge in the middle school.*) *Sovetsk. pedag.*, 1947, No. 8, 102-108.—This article is based on experience as a geography teacher, and is most concerned with procedures applicable to that type of material. At the beginning of the school year all students are tested to find out what the deficiencies in their knowledge are, and something about them as individuals. In the case of the subject matter of geography the testing lasts for a period of a few weeks, as the teacher probes into the weaknesses of the children who did not pass the first general examination. She mentions, for example, that she tries to discover what types of material a particular child tends to learn and retain best. She also discusses some other types of tests, such as concentrated short tests, which are convenient for such subjects as mathematics and physics.—*R. A. Bauer.*

[See also abstracts 1905, 1996.]

INTERESTS, ATTITUDES & HABITS

1935. Christensen, Harold T. (*Purdue U., Lafayette, Ind.*) *Courtship conduct as viewed by youth.* *J. Home Econ.*, 1948, 40, 187-188.—1,385 unmarried Mormon university students enrolled in marriage classes rated 20 courtship traits as to (1) degree of objectionability, (2) frequency of occurrence in the opposite sex, and (3) frequency in self. There was fairly close agreement (.80) between ratings by the 2 sexes as to degree of objectionability of these traits, though several prominent exceptions were noted. The most objectionable items were generally not the ones found most frequently in the opposite sex. Both from self and cross-sex criticisms

males were condemned as regards necking and petting, females as to egotistical dating and poor sportsmanship. In each case condemnation was more distinct when coming from the opposite sex than from self-criticism. Both sexes agree as to what is wrong with themselves, but regard their own weaknesses as the least serious.—*A. F. deGroat.*

1936. Engle, T. L. (*Indiana U., Indianapolis.*) *Pseudo-psychological beliefs of high school pupils.* *Proc. Ind. Acad. Sci.*, 1948, 57, 186.—Abstract.

[See also abstract 1707.]

SPECIAL EDUCATION

1937. Chittenden, Gertrude E., Nesbitt, Margaret, & Williams, Betsey. *The nursery school in American education today.* *Understanding the Child*, 1948, 17, 107-110.—". . . nursery education, through its deep respect for the individual, its emphasis on producing sound, critical, creative thinking, and its promotion of cooperative effort may make an important contribution to each child's growth and in turn plays an important part in the total educational scheme."—*J. L. Gewirtz.*

1938. Crosby, Laura Lange. (*Wis. Sch. for Deaf, Delavan.*) *Books of high interest and low vocabulary level to meet the needs of deaf students in grades seven through twelve.* *Amer. Ann. Deaf*, 1948, 93, 339-359.—An extensive list of reading materials is given which has been selected for use with children whose interest level is several years in advance of comprehension age. Annotated comments, and "stars" for interest to the deaf child, are given throughout the list. Materials are classified under headings. Several hundred items are listed.—*H. R. Myklebust.*

1939. Farrell, Malcolm J. (*Walter E. Fernald State School, Boston, Mass.*), Brazier, Mildred F., & Shea, John T. *A day class for community pupils in an institution for the mentally retarded.* *Amer. J. ment. Def.*, 1948, 53, 187-192.—An account is presented of the experimental day class program at the Walter E. Fernald State School which was specially designed for children of school age who are so severely handicapped mentally that they are considered unsuitable for special class training. Some of these children cannot be admitted to institutions because there are long waiting lists, and in the case of the others, their parents prefer to keep them at home. These youngsters are given the advantage of school experience and training by attendance at the day class. Even with rather limited resources and with the difficulties of transportation involved, the plan has proved not only workable, but able to fill a real community need. The program has had no less beneficial effect upon the parents than upon the pupils themselves.—*V. M. Staudt.*

1940. Joblin, Elgie E. M. *The education of the Indians of Western Ontario.* Toronto, Canada: Ontario College of Education, Dept. of Educ. Res., 1948. (Bull. No. 13.) 138 p. \$1.00.—After giving a

picture of Indian education in Canada and of the Ontario reserves, the author describes in detail 10 day and one residential schools for Indians. Among the weaknesses emphasized are failure of pupils to be promoted with corresponding accumulation in the lower grades and overagedness, feeling of frustration on the part of teachers, insufficient emphasis on mastery of English, inadequate equipment and poor attendance on part of pupils. Recommendations are given for administrative reorganization, increased compensation for teachers, the use of activity methods in teaching, a curriculum with emphasis on mastery of English, and development of vocational courses and a guidance program. Discussion of the comparative merits of residential and day schools, tables of performance on standard tests by Indian pupils, and a plea for progressive methods of teaching are also given.—*L. M. Hanks, Jr.*

1941. Kelly, Elizabeth M. (*Newark (N. J.) Public Schools.*) A family living course for mentally retarded girls at the pre-vocational school for girls, Newark, New Jersey. *Amer. J. ment. Def.*, 1948, 53, 193-198.—A special family living course for mentally retarded girls is discussed and the results of one year's experimentation with it are presented. As a result of this program the girls have come to know the meaning of sharing family life. They have discovered that a good healthy family life is having fun together; it means planning together; it means developing acceptable personal habits and observing the rules of social behavior; it means learning how to do necessary little everyday things; and finally it means being friends with the family and others. Such training can be a powerful force in increasing the social adequacy of the retarded.—*V. M. Staudt.*

1942. Kingsbury, Marion. (*Remedial Education Center, Washington, D. C.*) Remedial instruction. *Childh. Educ.*, 1948, 24, 308-311.—After a discussion of the physiological, psychological and emotional bases leading to learning difficulties, it is advocated that remedial instruction include careful diagnosis by an expert for determination of causes of difficulty and techniques of correction. Techniques may include psychiatric aid, individual instruction and rapport, motivation and arousing of interest through use of new materials and techniques and utilizing visual, auditory and kinesthetic instruction. Correction must include the cooperation of the school, tutor, and home. The most successful plan where possible is to keep the child in his regular classroom group during remedial instruction.—*G. H. Johnson.*

1943. McLaughlin, Katherine L. (*U. California, Los Angeles.*) Selected references on kindergarten-primary education. *Elem. Sch. J.*, 1948, 48, 450-455.—An annotated bibliography of 45 titles grouped under (1) general educational aspects, (2) curriculum, teaching procedures and materials, and (3) investigations and experimental studies has been compiled covering the period from January 1, 1947 to January 1, 1948.—*G. H. Johnson.*

1944. Maurer, Katharine M. (*U. Nebraska, Lincoln.*) Selected references on preschool and

parental education. *Elem. Sch. J.*, 1948, 48, 383-397.—An annotated bibliography of 37 selected references on preschool and parental education is presented omitting foreign language publications, textbooks and reviews, and popular articles containing little new material. The bibliography covers the period December 1, 1946 to December 1, 1947.—*G. H. Johnson.*

1945. Nash, Ethel. Mental hygiene and sex education. *Understanding the Child*, 1948, 17, 111-112.—Sex education involves more than merely giving information concerning the facts of reproduction and venereal disease. It is concerned also "with the whole gamut of human relations and personal adjustment, fields in which the home, the school and the wider community play their part." A list of reference books is appended.—*J. L. Gewirtz.*

1946. Robinson, Helen M. (*U. Chicago, Ill.*), & Ingram, Christine P. Selected references from the literature on exceptional children. *Elem. Sch. J.*, 1948, 48, 508-517.—An annotated bibliography of 91 selected references is presented and classified under the headings of (1) subnormal, backward, and dull-normal children; (2) behavior and problem cases and dependent children; (3) juvenile delinquency; (4) superior and gifted children; (5) blind and partially seeing children; (6) crippled children; (7) deaf and hard-of-hearing children; (8) delicate children; (9) speech defective; and (10) general references.—*G. H. Johnson.*

1947. Stevens, G. D. (*Milwaukee (Wis.) State Teachers Coll.*), & Stevens, H. A. Providing for the education of the mentally handicapped child in the rural school. *Elem. Sch. J.*, 1948, 48, 442-446.—The suggestion is made that the chief problem in the education of the slow-learner in the rural community is the special training of the teacher, since the typical one-room school has many characteristics similar to those of the special class, including small enrollment, wide age range, wide range of mental-age, many levels of academic readiness, variety of instructional materials and nonacademic activities, and instruction in small groups or individually. Keeping the mentally retarded child in the community reduces the economic burden, reduces stigma and provides training and environment suited to the needs and abilities of the children, whereas special classes in cities or towns would not necessarily be attuned to the needs of the rural child. Through in-service training, consultation services and traveling clinics, the one-room rural school and its teacher can provide for education of the mentally handicapped child.—*G. H. Johnson.*

[See also abstract 1692.]

EDUCATIONAL GUIDANCE

1948. Cox, Philip W. L., Duff, John Carr. (*New York U.*), & McNamara, Marie. *Basic principles of guidance.* New York: Prentice-Hall, 1948. xi, 439 p. \$5.00.—The desirable school in a democratic society is regarded as one in which "Provisions

are sought which safeguard the health, promote the family life, secure civic adjustments, encourage economic efficiency, and provide intelligently for the leisure time of adolescent boys and girls. These are the true curriculum." The authors suggest that behavior difficulties and personality distortion may result from rigid curriculum practices that thwart the natural impulses of adolescents. The aim of guidance is achievement of the wholesome personality which is founded on habits of cooperation. The role of the teacher, the importance of the curriculum, the use of school records, of the home-room, club programs, athletics, dramatics and participation in school government in such guidance work is discussed in separate chapters. Other chapters are devoted to guidance of deviating children, the superior, inferior and biologically defective. Vocational guidance is also discussed. Case history illustrations are used throughout the text. Chapter bibliographies. (Revision of 13: 664.)—J. W. Bowles, Jr.

1949. Hamrin, S. A. (*Northwestern U., Evanston, Ill.*) *Guidance talks to teachers.* Bloomington, Ill.: McKnight & McKnight, 1947. 249 p.—This volume presents edited versions of 10 talks on guidance to teacher groups. The talks are illustrated with practical examples and cover the basic guidance problems and situations, such as studying the individual, vocational information, use of leisure, mental hygiene, the teacher as a guidance worker, etc. Aids to putting the ideas into practice are given in 10 appendices, which present check lists for teacher self-evaluation in guidance, sample case histories and case studies, and illustrative materials for student autobiographies, daily schedules, student questionnaires, personnel records, study of community resources, and school guidance programs.—A. S. Thompson.

1950. Kuznetsova, P. S. *Izuchenie individual'nikh osobennostei uchashchikhsia.* (The study of the individual characteristics of students.) *Sovetsk. pedag.*, 1948, No. 1, 85-91.—The author describes several children in an elementary school class she taught in the years 1946-47. There is also a considerable description of some of their families.—R. A. Bauer.

1951. Lovelass, Harry D. *Summaries of research and sources of information in the field of guidance.* *Illinois State Norm. Univ. Bull.*, 1948, 46(211), 63-69.—Selected research reports, especially in the field of secondary school guidance, published in 1944 or later are reviewed. Major subjects considered include vocational information, group guidance, evaluation of guidance services, and preparation of guidance workers. 14 references.—C. M. Louttit.

[See also abstracts 1576, 1954.]

EDUCATIONAL MEASUREMENT

1952. Fomichev, A. P. *K desiatletiû so dnîa postanovleniâ TsK VP(b).* (The tenth anniversary

of the proclamation of the Central Committee of the All Union Communist Party (bolshevik), "Concerning the pedagogical perversions in the system of the Peoples Commissariat of Education.") *Sovetsk. pedag.*, 1946, No. 7, 11-20.—Prior to July 4, 1936, when this proclamation was made, the schools were under the domination of the so-called "pedagogues." They had relegated the teacher and the whole process of instruction to an inferior position, and conducted extensive testing programs on the basis of which the fate of children was decided. This program was abolished by this decree on the basis that the entire movement of pedology, especially as it was practiced in foreign countries, was regarded as a device for perpetuating the existing class structure by means of mass tests which demonstrated the superiority of the dominant classes and "superior races." It was furthermore felt that in the Soviet Union these tests were a very poor way of evaluating the child since they made only a partial assessment of his personality. Since this decree, testing has been abolished, and teachers have been restored to their correct place in the schools. "The record of the soviet schools in wartime show that we have the best school system in the world."—R. A. Bauer.

EDUCATION STAFF PERSONNEL

1953. Fishback, Woodson W. (*U. Chicago, Ill.*) *A rationale for the evaluation of student teaching.* *Elem. Sch. J.*, 1948, 48, 498-504.—A frame of reference for evaluation of student teaching is presented, characterized by 5 essential features which recognize both philosophical and psychological principles. The features are (1) evaluation as a continuous process; (2) basing evaluation on clearly defined tastes related to the learning process; (3) use of diagnostic instruments understood by the student teachers in gathering evidence; (4) contribution to respect for evaluation on part of student teachers; and (5) adoption of professional self-improvement pattern for each student teacher.—G. H. Johnson.

1954. Korman, T. A. *O psichologicheskoi praktike studentov v shkole.* (Psychological practice on school children.) *Sovetsk. pedag.*, 1948, No. 3, 54-62.—One of the basic reasons for giving students of pedagogical institutes psychological practice in the schools is to train them in the individual approach to students. The teacher must have a knowledge of child psychology, the ability to put that knowledge to practice, the ability to understand the personality of each child. Students who are doing practice observation are advised to select 2 children for observation, one of whom is doing well, the other of whom is not. The following categories should be used: interests, relationship of child to his work, relationship to other persons, traits of will, intellectual activity, attentivity, capabilities and inclinations, peculiarities of feeling and temperament.—R. A. Bauer.

1955. O'Reilly, Edmund Paul, & Tudyman, Al. (*Stanford U., Calif.*) *A psychodramatic measure of administrator success.* *Sociometry*, 1948, 2, 99-102.—

The selection of educational leaders is ordinarily done on a subjective basis, and this method can be judged to be inefficient from its practical results. To remedy this situation, a series of teacher- and principal-initiated situations were analyzed to find the elements of adequate administration. Evaluation methods were set up, based on the candidate's handling of two typical teacher-principal interview problems in a psychodramatic situation.—R. B. Ammons.

1956. Read, Katherine H. (*Oregon State Coll., Corvallis.*) A "situation test" is tested. *J. Home Econ.*, 1948, 40, 201-202.—In evaluating nursery school courses "typical situation" tests were given to freshmen students, more advanced students in child development and nursery school procedures, and nursery school teachers. The test appeared to measure growth and to differentiate between these groups. Validity of the test was established through the relationship between student grades (or ratings of teachers) and the test scores. Item analysis for items on which the groups differed indicated that teachers made fewer errors having to do with emotional needs, safety, enrichment of play experiences, and the defining of expected child behavior. Students made fewer errors on items which involved meeting individual needs in routine situations.—A. F. deGroat.

[See also abstract 1930.]

PERSONNEL PSYCHOLOGY

1957. [Anon.] Coordinator's manual. New Haven, Conn.: Employee Training Agreement Program, New Haven YMCA Junior College, 1948. vi, 40 p.—The New Haven (Connecticut) YMCA Junior College provides educational opportunities for student-employees of this area on part or full-time basis. Employees of 350 companies are represented in the program. A coordinator from the college and one from the company is selected to join in charting and guiding the progress of the student-employee. The activities, problems, and responsibilities of such coordinators are discussed together with suggested approaches to handling those problems which are most prominent. A statement is made relative to the future of such a program in which employee-college-employer cooperation means the "difference between a successful program and just another educational course." 19 references.—J. W. Hancock.

1958. Baumgarten, Fr. (*U. Berne, Switzerland.*) *Psychologie et facteur humain dans l'entreprise.* (Psychology and human factors in work.) Paris: Delachaux et Niestlé, 1948. 196 p. 8 Frs. s.—This book primarily covers social factors at work: supervision, giving of orders, responsibility. Chapters deal with the supervisor and the employee. The final chapter is entitled: selection of employees according to social and psychological criteria. 105-item bibliography.—R. W. Husband.

1959. Faber, E. N. *Leistungslohn nach der Arbeitsschwierigkeit.* (Remuneration according to the difficulty of the work.) *Industr. Psychotech.*, 1941, 18, 48-80.—This article gives an account of an investigation conducted with the personnel of a welding shop. The majority of the subjects had stated a preference for payment by the piece to payment by the hour and a mode of remuneration which would take account at the same time of the skill of the worker and of the difficulty of the work rather than of the one or the other of these elements. Another investigation attempted to determine the notion of the difficulty of the task and to state precisely according to statistical data the difficulty of the different tasks in a manner which appears satisfactory on the whole to serve as a basis for the fixing of wages.—(Courtesy of *Année psychol.*)

1960. Kreidt, Philip H., & Stone, C. Harold. (*U. Minnesota, Minneapolis.*) College courses for personnel work-union and management preferences. *Personnel J.*, 1948, 27, 247-250.—A questionnaire listing 32 college courses was filled out by 397 persons in industrial personnel positions. They checked those courses considered worthwhile and those they had taken themselves. Another questionnaire containing 28 courses, only seven of which were the same items as on the other one, were filled out by 40 persons in union staff positions. Both groups showed a wide discrepancy between the courses they considered worthwhile and those they had taken. Most personnel men selected courses in economics and psychology as most worthwhile. Except for courses in General Psychology and Speech, they preferred specialized technical courses to more general, elementary courses.—M. B. Mitchell.

[See also abstract 1917.]

SELECTION & PLACEMENT

1961. Foulds, G. A., & Raven, J. C. (*Crichton Royal, Dumfries, Scotland.*) Intellectual ability and occupational grade. *Occup. Psychol., Lond.*, 1948, 22, 197-203.—An employee sample of approximately 1,000 male workers voluntarily took the Progressive Matrices and Mill Hill Vocabulary Scale. The tests agree in differentiating groups in different occupational levels, though there is some considerable overlapping. It was also shown that employees added during the war years have, on the whole, less mental ability than pre-war employees.—G. S. Speer.

1962. Wilson, N. A. B. The work of the Civil Service Selection Board. *Occup. Psychol., Lond.*, 1948, 22, 204-212.—This report reviews the three years experience of the post-war method for selecting senior administrators for foreign and domestic civil service. The procedure involves personal history, interviews, references, questionnaires, qualifying examinations, cognitive and projection tests, and practical exercises.—G. S. Speer.

LABOR-MANAGEMENT RELATIONS

1963. Arthur, Guy B. **Changing aspects of the personnel function in management.** *Amer. Mgmt Ass. Personnel Ser.*, 1947, 139, 3-8.—Costs, unions, "isms," and research are 4 factors creating changes in personnel function. The reentrance of American business into a competitive era makes it necessary to reemphasize the personnel function. Current trends, results of good personnel administration, and attitudes of top management are discussed.—C. G. Browne.

1964. Bakke, E. Wight. (*Yale U., New Haven, Conn.*) **From tactics to strategy in industrial relations.** *Advanced Mgmt*, 1948, 13, 145-153.—The unsolved problem in human relations is a sound set of principles that tell us why men behave as they do. The results given by the analysts of the determinants of human behavior are not used because "practical men don't understand their jargon [and] their conclusions and generalizations didn't grow out of the analyses of the kind of human relations with which leaders of managements and unions are familiar." The declarations of leaders of management and labor are not precise statements of "causal relations between things over which you have some control and the reactions of human beings to those things." Basic research in human relations as they are existing in organized structures can provide the answer. Such structures have organizational charters, functional specifications, status systems, communication systems, reward and punishment systems, and technological systems within the framework of which observational data exist, and from the assimilation and interpretation of those data some general principles can be developed.—H. Moore.

1965. Bavelas, Alex. **Some problems of organizational change.** *J. soc. Issues*, 1948, 4(3), 48-52.—Each industrial plant has its own unique culture, which regulates and stabilizes the working group. Change may be of a sort that the system can accommodate with only minor irritation. Alternately change may be seriously disorganizing. In such a case the change may be introduced slowly and piecemeal to produce gradual accommodation or by group decision which brings about acceptance of the new idea as a postulate for future action.—L. M. Hanks, Jr.

1966. Becker, Esther R. **Office manners—the gals talk back.** *Personnel J.*, 1948, 27, 218-222.—An informal survey of the feelings of certain unidentified office workers is reported without statistical analysis. The workers showed a need for financial and social recognition. They wanted pay raises without having to ask for them. Most girls resented being kept overtime without notice, even when given overtime pay. Some complained about being asked to do work for the wife of the boss. Some expected their boss to ask their permission to smoke. Some wanted the boss to formally introduce them to his visitors. Most girls preferred men bosses. They gave few reasons but felt women were too personal in their criticisms. Fellow workers were criticized for

such things as not returning borrowed office materials, talking, and entertaining visitors too much.—M. B. Mitchell.

1967. Eisenberg, Wm. J. **Qualities essential for supervisors.** *Personnel J.*, 1948, 27, 251-257.—A 25-item questionnaire was filled out by over 800 wartime first line and co-ordinating supervisors. They checked 5 items in each of 4 different columns according to how essential they considered the qualities for supervisors. The items were weighted and grouped. High rank correlations were claimed between the rankings of federal and industrial supervisors, between supervisors in different fields, between first line and co-ordinating supervisors, and between male and female supervisors.—M. B. Mitchell.

1968. Gillespie, James J. **Free expression in industry; a social-psychological study of work and leisure.** London: Pilot Press, 1948. x, 167 p. 10s. 6d.—This is a socio-psychological study of the reciprocal relationship between work and leisure by an author who began his industrial experience when 13 years old. An examination of modern industry shows that the management structure is authoritarian, and that as techniques of organisation increase, freedom in work decreases. "Because work is not free there is aggression from those whose work is decreasingly responsible, and, also, a measure of regression to infantilism in escapist leisure time amusements." Freedom is greater in leisure time activities than in one's working life. "In the role of worker the person develops worker class consciousness, and in the role of citizen he tends to develop social consciousness." The author deplores the results of the work of efficiency specialists with the atomization of managerial responsibility and the continuing absolutist influence of management which should be replaced by a more democratic leadership. Drawing upon the teachings of Freud, Moreno, Jung, and Lewin, he analyses the forces that determine our behavior arising from the interaction of the individual with social forces, with an application to industrial democracy through proper methods of leadership training.—P. S. de Q. Cabot.

1969. Haire, Mason. **Some problems of industrial training.** *J. soc. Issues*, 1948, 4(3), 41-47.—Training of employees in human relations by a system of courses results usually in failure to transfer course precepts to the working situation. If learning be viewed not as pure habit formation but as culture change within a plant, it becomes clear that management must be directly involved, since management is the chief agent of change in the plant culture. Only by inducing management to assume an active role in change can training be effective.—L. M. Hanks, Jr.

1970. Hawker, C. F. **Pattern for management unity.** *Amer. Mgmt Ass. Personnel Ser.*, 1947, No. 113, 31-49.—Through the means of 30 described slides the troubles of the worker advanced to supervisory status are depicted. From the preview, a program for development of management units is

described which incorporates careful selection, training for all members of management, recognition of ability, acceptance, and the maintenance of a good communication system.—*J. W. Hancock*.

1971. **Knickerbocker, Irving.** *Leadership: a conception and some implications.* *J. soc. Issues*, 1948, 4(3), 23-40.—Leadership is a functional relationship between a person and group rather than a complex characteristic of an individual. Leaders arise through the active process of people interacting to satisfy their needs, and the leader is frequently that role which orders and plans group activity. He is regarded by the group as a means of satisfying needs, will be chosen by sundry means with this end in view and continue to lead so long as this function occurs. Industrial leaders, because of being appointed, face the difficulty of non-correspondence between their needs and those of the workers. The methods of coping with this non-correspondence have been force and paternalism, though bargaining and mutual cooperation in a common endeavor are found frequently today. This last device, to the extent that it can be realized, is the key to increasing the security of industrial leaders in their appointed roles.—*L. M. Hanks, Jr.*

1972. **Long, Harry.** (*Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.*) *Stimulating teamwork between foremen and union stewards.* *Amer. Mgmt Ass. Personnel Ser.*, 1947, No. 113, 50-56.—The establishment of human engineering programs, the selection of the proper means of communication, the careful handling of meetings of various kinds with union men have resulted in changed attitudes and pleasant relations in which the freedom of speech is an important factor.—*J. W. Hancock*.

1973. **McGregor, Douglas.** *The staff function in human relations.* *J. soc. Issues*, 1948, 4(3), 5-22.—*Staff* refers here to the professional consultant on human relations who is invited to solve human problems in production. The proper relationship of staff to management is to avoid interfering in any way with the usual avenues of authority. This means eschewing invitations to be responsible for human affairs while management is concerned with production. The task is rather to induce management to accept policies leading to favorable relationships within the organization. This means casting aside reductive authority, or the blocking of avenues to need satisfaction as a technique leading to change, and adopting augmentive methods, those techniques which increase the avenues for satisfying needs. This may be accomplished by a series of small steps where cooperative exploration, based upon a relationship of mutual confidence, enables management to select, try out, and execute a plan under its own responsibility.—*L. M. Hanks, Jr.*

1974. **Nicol, Eric A.** *Management through consultative supervision.* *Personnel J.*, 1948, 27, 207-217.—Consultative supervision is an effective method of vitalizing management and getting the cooperation of all employees in developing company policies and procedures as well as in improving production.

By holding monthly meetings of all levels of supervisors with their immediate superior as chairman, lines of communication can be established. Minutes should be taken and someone made responsible for seeing that matters discussed are carried up and down the line to other groups so that all may participate. Thus by permitting everyone an opportunity to discuss and contribute to the formulation of policies and procedures, supervisors cooperate and develop enthusiasm for increasing production.—*M. B. Mitchell*.

1975. **Redfield, James W.** (*George Fry & Associates, Chicago, Ill.*) *Appraising employee attitudes.* *Advanced Mgmt*, 1948, 13, 164-169.—Using one study of 400 clerical and supervisory workers in a utility company as an illustration, the author points out the following benefits to be derived from attitude studies: opportunity given employees to express themselves, gathering data on what employees think about specific elements in the work situation, spotting weaknesses in the personnel and administrative program, management giving clear proof of interest in furthering satisfactory employee relations, personnel tending to become more cooperative and productive, top executives increasing their interest in employer-employee relationships, and management and supervisors being brought closer together.—*H. Moore*.

1976. **Reynolds, Lloyd G., & Shister, Joseph.** (*Yale U., New Haven, Conn.*) *The worker's view of job opportunity.* *Advanced Mgmt*, 1948, 13, 170-177.—This interpretation of the workers', in contradistinction to that of the economists', views of job conditions and possibilities, is based on surveys made in 1947. The prime factors responsible for job discontent are: unsatisfactory physical characteristics of the job, wages inadequate to meet customary standards of living, unfair treatment of one sort or another, lack of sufficient independence on the job, and the uninteresting nature of the work done. According to the authors' interpretation of the workers' feelings about and attitude toward the job situation: (1) Relative wages are more significant than absolute—relative to other workers on the same or similar jobs, (2) good jobs are scarce and hard to find, in spite of contrary reports, (3) the technique of job hunting adopted by the worker is political rather than economic—affected by tips and reports from acquaintances, (4) workers develop an attachment to good jobs and resist change, (5) many quickly accept occupational limitations. Three conclusions are of significance to management: (1) non-wage factors are important in recruitment and stability, (2) worker dissatisfaction cannot be entirely eliminated from industry, (3) the fringe wage payments and company welfare programs have less effect than one might think.—*H. Moore*.

1977. **Rogin, Lawrence.** (*Textile Workers Union of America, CIO, N. Y.*) *A union view of plant newspapers.* *Amer. Mgmt. Ass. Personnel Ser.*, 1947, No. 113, 23-30.—A change in general manage-

ment attitude toward the content of plant newsheets is indicated, before the union element can accept them as more than gossip sheets. The issues of fundamental interest to the workers, in most part, are omitted. At such a time as they are included, union-management relations will have taken a great step toward unity of purpose.—*J. W. Hancock*.

1978. Royse, L. O. **Office organization and personnel trends.** *Amer. Mgmt. Ass. Personnel Ser.*, 1947, 139, 17-22.—Since top management is so close to the office function, it should take pride in developing office work and techniques to the highest possible level. This includes better training procedures, improvement in employee morale and attitudes, and the development of stability and security of employment.—*C. G. Browne*.

1979. Schuster, George. **Human relations in industry.** *Brit. med. J.*, 1948, 1, 505-510.—It is stressed that industrial managers who take human interest in their workers merely as a means to an end namely, to improve production results, are both wrong and unsuccessful. It is wrong to treat human beings merely as means to an end. The author sees a threefold purpose of industrial activity: (1) to achieve "excellence" in production; (2) to provide for the human beings engaged in it a satisfactory activity as the foundation of a good life; (3) to fit in as an important part of a satisfactory pattern of society. Primarily concerned with the second aim, the author would point out in this connection the role of the industrial medical officer as a member of the management team. Such a medical officer should have beside his knowledge of physical disease a wealth of psychological insight. In his close contacts with the workers, he should be sensitive to the psychological needs of the men and eager to bring about a psychological atmosphere, to heighten the morale of the men in every possible way in order that they may find more joy in their work.—*F. C. Sumner*.

1980. Smith, F. C. **Effective use of discipline.** *Personnel J.*, 1948, 27, 258-262.—Discipline can destroy morale if administered without understanding. On the other hand, it can be necessary and constructive. This is especially true if the employees are rebellious because they believe management is weak.—*M. B. Mitchell*.

1981. Wadsworth, Guy W., Jr. (*Southern Counties Gas Co., Los Angeles, Calif.*) **V. The Field Review Method of employee evaluation and internal placement.** *Personnel J.*, 1948, 27, 227-232.—This discussion of the Field Review Method concerns the part the personnel man should play in relation to supervisors' evaluation of employees. It is particularly concerned with the supervisors' attitudes in connection with the evaluation of work as a basis for promotion. The personnel man must himself evaluate supervisors' attitudes and make possible the transfer of employees if promotion appears impossible for any reason with the department in which the man is. It is the personnel man's function to place personnel most efficiently in the total organization.—*M. B. Mitchell*.

1982. Wadsworth, Guy W., Jr. (*Southern Counties Gas Co., Los Angeles, Calif.*) **VI. The Field Review Method of employee evaluation and internal placement.** *Personnel J.*, 1948, 27, 263-268.—The Field Review Method should be applied to the whole company except for small technical groups and large groups of casual employees. Privacy during the field review contact is essential. It should not be held within hearing distance of the employees. An experienced personnel man can conduct the contacts quickly enough that locating even one good man misplaced or one non-producer will pay for the time spent. Follow-up should be made three or four times per year. Data from the field notes should be recorded on each employee's permanent record. When men needed in one department are found in another, transfers can be made immediately with a minimum of permanent record keeping. (see 23: 322).—*M. B. Mitchell*.

1983. Weinstock, Irving. **Merit rating—a restatement of principles.** *Personnel J.*, 1948, 27, 223-226.—The object of merit rating is to obtain a somewhat objective evaluation of the employee's work performance and progress. It may be used as the basis for such personnel action as wage increases, promotion, transfer, or layoff. More important, it may be used by the supervisor to point out strengths and weaknesses and as a basis for improving performance. Merit rating cannot successfully be imposed from above; all levels of management must participate. All employees as well as supervisors should be trained in the use of the merit rating system.—*M. B. Mitchell*.

1984. Worthy, James C. (*Sears, Roebuck & Co., Chicago, Ill.*) **Discovering and evaluating employee attitudes.** *Amer. Mgmt. Ass. Personnel Ser.*, 1947, No. 113, 13-22.—Through a simplified type of questionnaire, an "organization survey" is made which has as its scope the "functioning of the organization as a whole." From survey results a corrective process is begun which includes informal discussions with the store manager. It is concluded that better relations begin at the top of an organization; and that employee attitudes "cannot be influenced effectively by direct frontal attack." Job attitudes are greatly the product of a worker's experience on the job.—*J. W. Hancock*.

INDUSTRIAL AND OTHER APPLICATIONS

1985. Crane, George W. (*Northwestern U., Evanston, Ill.*) **Psychology applied.** Chicago, Ill.: Hopkins Syndicate, Inc., 1948. x, 680 p.—This book is designed to give a "comprehensive survey of the applications of psychology in the field of human relations," and is recommended by the author as a textbook for an introductory course in psychology. There are 16 chapters dealing with such general topics as motivation, learning, efficiency, individual differences, suggestion, and personality. Other chapters relate psychology to sales,

advertising, music, writing, art, speaking, children, education, psychiatry, law, and medicine.—C. G. Browne.

INDUSTRY

1986. Bartlett, F. C. Men, machines, and productivity. *Occup. Psychol., Lond.*, 1948, 22, 190-196.—In nearly all machine controlled work, the important matters to be considered are: the adaptation of display and control so that the great majority of average workers have a fair chance to work well without unnecessary strain, and a better understanding of timing, anticipation, and standards of performance. Most workers produce effectively under proper conditions.—G. S. Speer.

1987. Christensen, Julien M. (Aero Med. Lab., Wright-Patterson Air Force Base, Dayton, O.) The effect of the staircase scale on dial reading accuracy. Dayton, O.: Wright-Patterson Air Force Base, 1948, U. S. Air Force Materiel Command. (U. S. Air Force Memorandum Rep. Ser. No. MCRCED-694-1-P.) 17 p.—A staircase scale is one which relates the length of the graduation mark to the size of digit it represents. To investigate the effectiveness of such a scale in reducing reversal errors in the reading of dial scales, a test using the "card rotation method" was administered to 33 college students and 20 Air Training Command pilots. The test stimuli also differed systematically as to direction of scale (clockwise vs. counterclockwise) and zero point position (top vs. bottom). Significantly, but not strikingly, fewer reversal errors were made on dials having staircase scales than on those with conventional scales. No significant difference appeared in the number of errors on top and bottom zero point dials. Significantly fewer errors were made in reading clockwise scales.—N. L. Gage.

1988. Edwards, Paul M. (Edwards & Barnes, Pittsburgh, Pa.) Statistical methods in job evaluation. *Advanced Mgmt.*, 1948, 13, 158-163.—The job evaluation plan includes 12 steps: selecting the jobs, selecting and defining the factors, selecting sample jobs, describing the jobs, ranking the jobs in each factor, grouping the job rankings into degrees, ranking the jobs in total by their rates, grouping the total job rankings into labor grades, solving each degree in each factor for its weight in labor grades, defining each degree in each factor in terms of work elements, assembling a work evaluation manual, and organizing and executing the evaluation program. Ten factors are suggested as necessary for evaluating operating jobs in steel companies. The distinctiveness of the plan lies in the principle of weighting the factors subsequent to the assignment of labor grades.—H. Moore.

1989. Friedmann, Georges. Automatism and industrial work. *Appl. Anthropol.*, 1948, 7(3), 7-15.—Evolution is seen in the history of production toward eliminating the role of the worker in fabricating a product and replacing his function by machinery. In the first industrial revolution machines

removed man as a source of power but left many operations still contingent upon the worker, e.g. the power drill. The second industrial revolution continued the process by making many operations semi-automatic, e.g. the turret lathe. The third stage is the automatic machine where the worker is no longer an operator but a supervisor, e.g. the automatic loom. Complete automatization requires favorable economic conditions and adequate technology which can substitute machinery for human perception and judgment. The final result will be the elimination of the semi-skilled worker and his replacement by the "skilled adjuster-builders and supervisors."—L. M. Hanks, Jr.

1990. King, Clark W. (Allegheny Ludlum Steel Corp., Pittsburgh, Pa.) Getting information to employees and the public. *Amer. Mgmt Ass. Personnel Ser.*, 1947, No. 113, 3-12.—A method is presented for supplying information and changing attitudes by employees and public toward a corporation. The techniques used show what a carefully planned campaign can do.—J. W. Hancock.

1991. Lauer, A. R. (Iowa State Coll., Ames.) Certain structural components of letters for improving the efficiency of the stop sign. *Proc. 27th Annu. Meet. Highw. Res. Bd.*, 1947, 360-371.—A series of experimental studies of the most efficient form of highway stop signs resulted in the conclusion that improvement in legibility up to 50% of existing stop signs may be made. Experiments were conducted on letter difficulty, stroke, width-height relation, spacing, letter formation and fit on the conventional and a modified octagonal stop sign. Characteristics found superior were: strengthening of the letter T, strokes about 25% of the letter width, ovalizing the O, elongating signs horizontally, and use of reflectorized red. The most effective stop sign is a combination of red and white reflectorized materials, with a third color used for letterings.—B. Wellman.

1992. Maynard, Harold B., Stegemerten, G. J., & Schwab, John L. *Methods-time measurement*. New York: McGraw-Hill, 1948. x, 292 p. \$3.75.—A thorough discussion of the methods-time measurement procedure, in which its development, uses and benefits are treated. In textbook form it handles body, limb, and digit movement as applied to office and industrial work, presents pertinent principles, develops method procedure, and applied procedure in a number of special areas including assembly work and performance rating.—J. W. Hancock.

1993. Quednau, H. *Die Monotonie, ihre Analyse und ihre Theorie*. (Monotony, its analysis and its theory.) *Industr. Psychotech.*, 1946, 17, 84-100.—A distributing apparatus causes balls to glide along an inclined plane at the rhythm of a ball per second; the ball must be caught by the subject at the other extremity of the table before it falls to the floor. In experiments consisting of continuous work for 60 to 90 minutes, with summary of errors every 20

minutes, observation of the behavior of the subject and interview immediately after the experiment have led the author to distinguish several types of reaction among the 11 subjects examined. In consequence of his results and after review of researches published on the question, the author concludes that the feeling of monotony in the presence of a uniform work depends on the personality of the subject and on his interests, in such wise that one can not hope to determine in professional orientation, for example, the capacity of resistance to the feeling of monotony by contenting oneself with having a subject execute any uniform task.—(Courtesy of *Année psychol.*)

1994. Siegel, B. *Begutachtung von Plakaten für innerbetriebliche Werbung.* (Evaluation of posters for their influence within the business establishment.) *Industr. Psychotech.*, 1942, 19, 93-113.—Posters designed to propagate among the workers and employees of a business establishment certain ideas affecting the organization of the work (precautions for avoiding accidents, utilization of the "suggestion box," etc.) have been presented, on the one hand, to 28 workers and, on the other hand, to 6 specialists on another occasion. The judgments of the subjects after tachistoscopic exposure (repeated presentation of the same posters for progressively lengthened exposure-times) and detailed analyses of the content of the diverse posters have led to the establishment of a schema of evaluation with quantitative notation of the diverse aspects of the posters.—(Courtesy of *Année psychol.*)

1995. Weibel, G. Luther. (*Clinton, Tenn.*) *Industrial vision program—three years' operation.* *Optom. Wkly.*, 1948, 39, 1709-1713.—A review of the results of a vision testing program in a women's hosiery manufacturing company is presented, showing increased efficiency in certain processes requiring accurate acuity.—D. Shaad.

[See also abstracts 1545, 1575, 1582, 1832.]

BUSINESS & COMMERCE

1996. Turse, Paul L. (*Peekskill (N. Y.) High School.*) *Validity of the syllable count.* *J. Bus. Educ.*, 1948, 23, 29-32.—Screening tests of dictation and transcription were given to 144 applicants for stenographic positions. Correlation coefficients computed between three variables (letter count, syllable count, and shorthand stroke count for each word missed) and the error frequency for each word were all low (between -.14 and .28). Spelling, punctuation, and grammatical errors were not counted in the error analysis. An analysis of transcription errors selected at random suggested that shorthand difficulty of a

given word may vary with the contextual position and other uncontrolled factors. Further evidence showing the lack of relationship between actual transcription difficulty and syllable count was obtained from high school shorthand students.—A. F. deGroat.

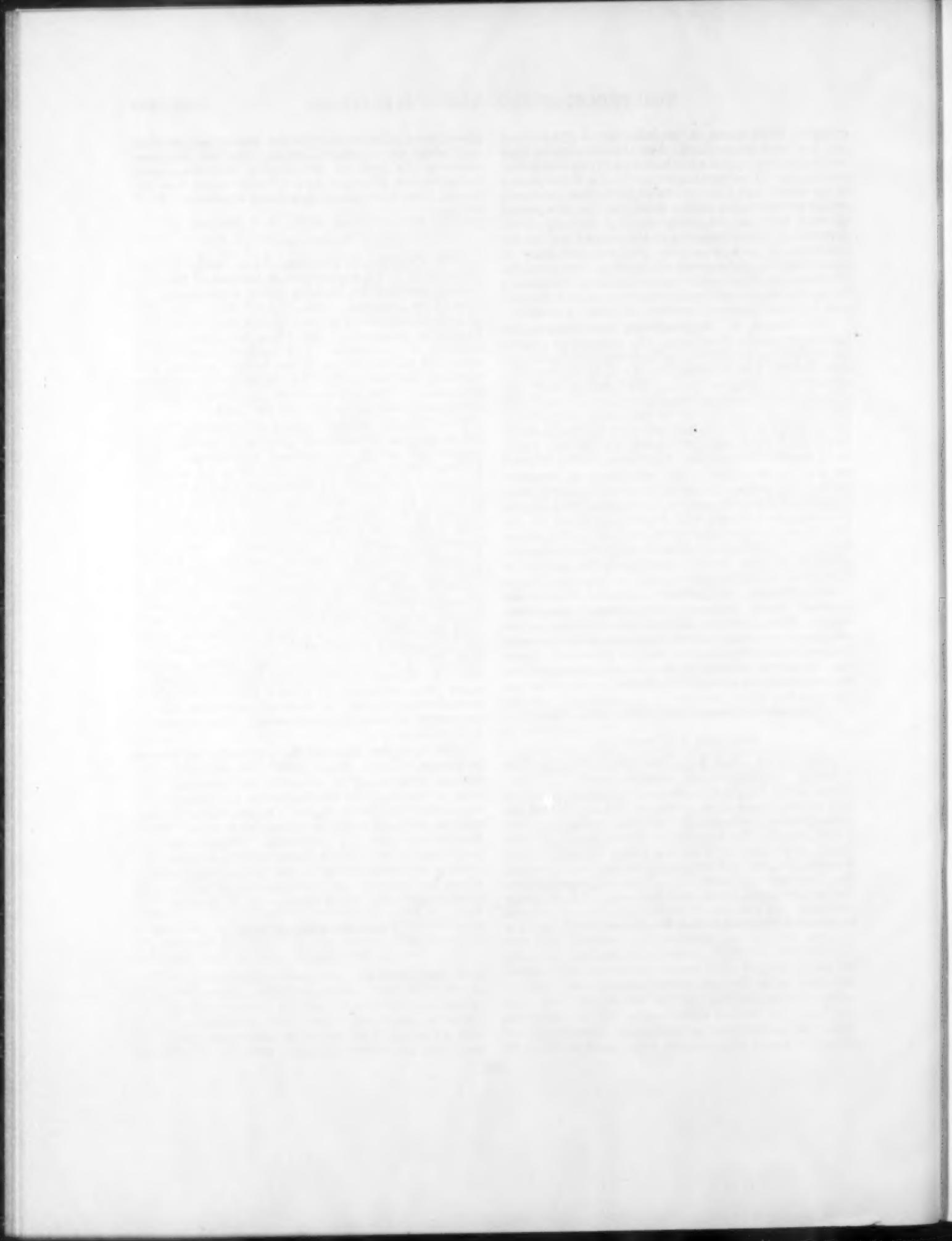
PROFESSIONS

1997. Gourley, G. Douglas. (*Los Angeles (Calif.) Police Dept.*) *An experiment in the use of the conference method for training police supervisors.* *J. crim. Law Criminol.*, 1948, 39, 392-401.—The plan of an extensive use of the conference method resulted from the problem of providing adequate recruit training of policemen. The conference method is described as the reverse of the lecture method, and requires skill in questioning in order to stimulate discussion. This is considered an effective method of training new sergeants.—V. M. Stark.

1998. Nahm, Helen. (*Duke U., Durham, N. C.*) *An evaluation of selected schools of nursing with respect to certain educational objectives.* *Appl. Psychol. Monogr.*, 1948, No. 17. 96 p.—A study of 428 senior students in 12 Minnesota schools to determine the extent to which the following six selected objectives are realized in practice: (1) satisfaction with nursing; (2) democratic rather than autocratic beliefs and practices; (3) understanding and ability to apply principles of mental hygiene; (4) well-adjusted and integrated personality; (5) wide range of social, cultural, and recreational interests; (6) interest in and understanding of social, political, and economic issues. The following evaluation instruments were used respectively: (1) a nursing satisfaction scale; (2) a specially constructed autocratic-democratic test; (3) a specially constructed mental hygiene test; (4) Minnesota Personality Scale; (5) questionnaire items designed to obtain information about social, cultural, and recreational activities; (6) an Inventory of Social Understanding. 28 references.—C. H. Sprow.

1999. Quigley, Dorothy R. *Psychological factors in illness.* *Hosp. Progr.*, 1947, 28, 403-407.—Attention is focussed on some of the problems that arise in teaching the student nurse how adequately to evaluate the psychological, i.e., emotional factors, in cases of illness and how to cope with them. Three illustrative cases are presented. Suggestions are given how to teach the student nurse to evaluate the role the emotional needs of the patient, particularly worry and anxiety, play in a particular disease and how to cope with this problem.—F. C. Sumner.

[See also abstract 1580.]



1948 DIRECTORY

AMERICAN PSYCHOLOGICAL ASSOCIATION

1515 MASSACHUSETTS AVENUE NORTHWEST

WASHINGTON 5, D. C.

This directory gives biographical data and fields of interest for the Fellows and Associates of the American Psychological Association. Membership lists for the Divisions of the Association, the by-laws, a list of past officers and meeting places, and a geographical and institutional index of members are included. The directory is edited by Helen M. Wolfe of the Association staff.

According to present plans of the Association, another directory including biographical data will not be published until 1951. The interim issues will contain the names of the members, their addresses, and their present positions.

438 pages

\$3.00

THE PSYCHOLOGY OF PERSONAL ADJUSTMENT

By FRED MCKINNEY

*Chairman of the Psychology Department and Psychologist
in the Student Health Service, University of Missouri*

The Psychology of Personal Adjustment offers an accumulation of suggestions from psychological, biological, sociological, and educational literature which the college student may use in building his personality with the facilities available on the campus. It is based not only upon teaching experience, but upon Dr. McKinney's many years of clinical experience as well.

This new second edition recognizes the recent trend toward nondirective counseling and the study of the total individual. Another feature of the second edition is the greater emphasis which is placed upon the basic concepts of adjustment.

2nd Ed. May 1949

Approx. 754 pages

College Ed. Prob. \$5.00

PERSONNEL SELECTION

Test and Measurement Techniques

By ROBERT L. THORNDIKE

Professor of Education, Teachers College, Columbia University

Personnel Selection discusses in turn the five basic steps which go into a successful personnel testing program: 1—analyzing the job to be filled; 2—preparing the trial tests; 3—analyzing the results of the tests; 4—discarding the poor tests and combining the rest into an accurate testing instrument; 5—administering the tests most effectively.

Statistical formulas are considered in *Personnel Selection*, since they play an important part in setting up and evaluating tests, but in general the author stresses the reasoning behind the formulas rather than the formulas themselves.

March 1949

358 pages

\$4.00

OTHER NEW WILEY BOOKS OF INTEREST

Methods of Psychology, edited by T. G. Andrews, 1948. 716 pages. \$5.00

Foundations of Psychology, edited by Edwin G. Boring, Herbert S. Langfeld, and Harry P. Weld. 1948. 632 double-column pages. \$4.00

Adolescent Character and Personality, by Robert J. Havighurst and Hilda Taba. 1949. 315 pages. \$4.00

Elmtown's Youth: The Impact of Social Classes on Adolescents, by A. B. Hollingshead. Ready in May. 480 pages. Prob. \$3.50

JOHN WILEY & SONS, Inc., 440-4th Ave., New York 16, N. Y.

Recognized as *AN Institution*

THE CENTURY PSYCHOLOGY SERIES

Edited by RICHARD M. ELLIOTT, *University of Minnesota*

THE CENTURY PSYCHOLOGY SERIES, under the able editorial direction of Richard M. Elliott, of the University of Minnesota, is not just another "series" of college textbooks. Its chief aim has been to sponsor original contributions to knowledge from outstanding scholars in

the fields of Psychology. How well the Series is fulfilling its original purpose is indicated by the distinguished list of authors whose books bear THE CENTURY PSYCHOLOGY SERIES imprint.

CHARLES BIRD
DOROTHY M. BIRD
EDWIN G. BORING
ALBERT R. CHANDLER
WAYNE DENNIS
HENRY E. GARRETT
FLORENCE L. GOODENOUGH

STARKE R. HATHAWAY
EDNA HEIDBREDER
ERNEST R. HILGARD
CLARK L. HULL
HAROLD E. JONES
FRED S. KELLER
RALPH LINTON
DONALD G. MARQUIS

A. T. POFFENBERGER
B. F. SKINNER
PERCIVAL M. SYMONDS
EDWARD L. THORNDIKE
MILES A. TINKER
EDWARD CHACE TOLMAN
LEONA E. TYLER

Published by APPLETON-CENTURY-CROFTS, INC.

35 West 32nd Street

New York 1, N. Y.

Special Pre-publication Offer to Readers of the Abstracts

The Encyclopedia of **CRIMINOLOGY**

Edited by Dr. Vernon C. Brantham and Dr. Samuel B. Kutash

THIS comprehensive work will serve the needs of all those concerned with the problems of crime and criminality. It is a compendium of existing facts and knowledge in criminology and deals at the same time with important current trends and departures in this highly complex field. This has been accomplished through the combined efforts of sixty-one outstanding specialists in a variety of disciplines, including:

**PSYCHOLOGY PENOLOGY POLICE SCIENCE SOCIOLOGY RELIGION HISTORY
LAW PSYCHIATRY PHILOSOPHY EDUCATION MEDICINE RESEARCH**

CONTRIBUTORS INCLUDE: Hon. Justice Francis Bergan; Nathaniel Cantor, *Ph.D.*; Hervey Cleckley, *M.D.*; Marshall B. Clinard, *Ph.D.*; Victoria Cranford; Senator Thomas C. Desmond; Arthur N. Foote, *M.D.*; G. I. Giardini, *Ed.D.*; Eleanor Glueck, *Ph.D.*; Sheldon Glueck, *Ph.D.*; Irving W. Halpern; Leland E. Hinsie, *M.D.*; Hon. Alexander Holtzoff; Hon. J. Edgar Hoover; Warden Lewis E. Lawes; V. A. Leonard, *Ph.D.*; Robert M. Lindner, *Ph.D.*; Edwin J. Lukas, *LL.D.*; Elio D. Monachesi, *Ph.D.*; Winfred Overholser, *M.D.*; Michael J. Pescor, *M.D.*; Walter C. Reckless, *Ph.D.*; Orlando F. Scott, *M.D.*; Robert V. Seliger, *M.D.*; Lowell S. Selling, *M.D.*; Herman K. Spector; Edwin H. Sutherland, *Ph.D.*; Negley K. Teeters, *Ph.D.*; Louis P. Thorpe, *Ph.D.*; Joseph G. Wilson, *M.D.*; Fritz Wittels, *M.D.*; Martin L. Wolf, *LL.D.*; Arthur L. Wood, *Ph.D.*

Publication: June, 1949.

Approx. 500,000 words.

\$12.00

Publication date is
June, 1949. If you
send in your order
before publication,
you can get your
copy for

ONLY \$10.00

SPECIAL ORDER COUPON

PHILOSOPHICAL LIBRARY, *Publishers*
15 East 40th Street, Dept. 115, New York 16, N. Y.

Enclosed is \$_____ for _____ copy(ies) of THE ENCYCLOPEDIA OF CRIMINOLOGY, at the special Pre-publication price of \$10.00 per copy. The book(s) to be mailed to me immediately upon publication.

NAME _____

ADDRESS _____

(Expedite shipment by enclosing remittance)

REPORT TO LIBRARIANS

Available Back Issues of the Psychological Abstracts

Twenty-four issues of the Psychological Abstracts became out-of-print during 1948. Libraries and institutions ordering "All Available Issues" ordered 45 sets of this journal.

Estimating a similar number of sales of all available issues during 1949, the inventory shows that 16 other issues will become out-of-print during the next year; that is, there are as of January 2, 1949, 16 issues of fewer than 45 copies each.

Copies of this journal are stored in the warehouse of Lancaster Press. About 250 separate issues are handled for an "All Available Issues" sale. Three weeks should be allowed before expecting such an order to be filled. For quicker handling, the APA keeps issues of the last two years available in the APA office. The peak work period of the year is January and February, when librarians are preparing journals for the bindery, and ordering replacement copies.

AMERICAN PSYCHOLOGICAL ASSOCIATION
1515 Massachusetts Avenue Northwest
Washington 5, D. C.

ABSTRACTS OF HUMAN BIOLOGY

A sectional edition of *Biological Abstracts* designed particularly
for psychologists and related fields

Section H—Abstracts of Human Biology—includes Human Heredity; Population; Anatomy and Embryology; Child Development; Adolescence; Growth; Nutritional Disorders; Food Habits and Appetites, Malnutrition; Senescence; Endocrine Bases of Personality and Behavior; Reproduction and Sex; Human Ecology; Race; Health Factors Affecting Population and Human Adaptation; and kindred topics.

Section H does not compete with, or duplicate, any existing abstract services. Rather, it supplements these services by abstracting, from the biological point of view, the biological literature paralleling and directly applicable to that published in the psychological, neurological, sociological and anthropological journals.

Established in January, 1946, to meet the requirements in Psychology and related fields, Section H is priced at only \$6.50 (Foreign \$7.00). Write for full details and sample copy.

BIOLOGICAL ABSTRACTS

University of Pennsylvania
Philadelphia 4, Pennsylvania

PSYCHOLOGICAL ABSTRACTS

YEAR	VOL- UME													PRICE PER NUM- BER	PRICE PER VOLUME													
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	INDEX														
1927	1	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.50	\$4.00												
1928	2	—	2	3	4	5	6	7	8	9	10	11	12	—	\$.50	\$4.00												
1929	3	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.50	\$4.00												
1930	4	—	2	3	4	5	6	7	8	9	10	11	12	13	\$.50	\$4.00												
1931	5	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.50	\$4.00												
1932	6	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.50	\$4.00												
1933	7	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.50	\$4.00												
1934	8	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.50	\$4.00												
1935	9	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.50	\$4.00												
1936	10	—	2	3	—	5	6	7	8	9	10	11	12	13	\$.50	\$4.00												
1937	11	—	2	—	—	—	—	—	9	—	—	—	—	—	\$.75	\$1.50												
1938	12	—	—	—	—	—	—	7	8	9	10	11	12	13	\$.75	\$5.25												
1939	13	—	—	—	—	—	—	—	—	—	—	11	12	13	\$.75	\$2.25												
1940	14	—	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00												
1941	15	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00												
1942	16	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00												
1943	17	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00												
1944	18	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00												
1945	19	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00												
1946	20	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00												
1947	21	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00												
1948	22	1	2	3	4	5	6	7	8	9	10	11	12	13	\$.75	\$7.00												
1949	23	By subscription, \$7.00												\$.75	—													
															\$112.00													
															20% discount	22.40												
															\$89.60													

Information about the Psychological Abstracts: the journal is published 13 times per year, the regular December issue and the Index (#13) both appearing in December. Thirty-three numbers are out of print as shown in the table.

Information about prices: Volumes 1 through 10 have been reduced to \$4.00 per volume and \$.50 per issue. Volumes 11 through 22, and current subscriptions, are \$7.00 per volume and \$.75 per issue. The price for any volume through these years is either the sum of the prices of the individual numbers available or the price of the volume, whichever is less. For foreign orders \$.25 per volume should be added. The American Psychological Association gives the following discounts on any one journal:

- 10% on orders of \$ 50.00 and over
- 20% on orders of \$100.00 and over
- 30% on orders of \$150.00 and over

Current subscriptions and orders for back numbers and volumes should be addressed to:

AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

1515 Massachusetts Avenue, N.W.

Washington 5, D. C.

CHILD PSYCHOLOGY

Third Edition

By Arthur T. Jersild, *Teachers College, Columbia University*

Completely revised, this famous text tells the story of development even more understandingly in terms of what it means to the growing child. This insight gives the student a more practical basis for interpreting the details of behavior he can observe in everyday life. Examples broadened, new charts and tables added, bibliographies enlarged.

Published 1947

623 pages

5½" x 8"



MEASUREMENT IN TODAY'S SCHOOLS

Second Edition

By Clay C. Ross, *formerly University of Kentucky*

The intelligent use, interpretation and evaluation of measurement tests are detailed in a completely revised, up-to-the-minute work. An 80 page separately bound Workbook, designed for increased teachability, contains chapter review problems and exercises.

Published 1947

551 pages

6" x 9"

ELEMENTARY EDUCATIONAL PSYCHOLOGY

Edited by Charles E. Skinner, *New York University*

A clear, concise study of psychological facts, principles and techniques needed by teachers. "An excellently organized text."—W. J. Taylor, *Long Island University*

Published 1945

448 pages

6" x 9"



THE NATURE AND CONDITIONS OF LEARNING

BY Howard L. Kingsley, *formerly Boston University*

An up-to-date, well organized treatment of psychology of learning for prospective teachers, written in language students understand. It closes the gap between scientific psychology and classroom teaching.

Published 1946

579 pages

6" x 9"

Send for your copies today!

PRENTICE-HALL, INC.,

70 FIFTH AVENUE
NEW YORK 11, N. Y.

